# REPORT
# on the
# WORLD SOCIAL
# SITUATION

**including studies of**
**urbanization in under-developed areas**

*prepared by the Bureau of Social Affairs, United Nations Secretariat,*
*in co-operation with*
*the International Labour Office, the Food and Agriculture Organization,*
*the United Nations Educational, Scientific and Cultural Organization*
*and the World Health Organization*



UNITED NATIONS
NEW YORK, 1957

# CORRIGENDUM

## REPORT ON THE WORLD SOCIAL SITUATION

Page 33, footnote 19 for "Journal of the American Medical Association" read "' of the American Medical Women's Association".

Page 43, footnote 42 replace the present footnote by the following text "In the Union, for example, a widely distributed network of health establishments, according to population density and other local conditions, provides both curative preventive services for the rural population. Every rural district has one hospital with about 50 to 150 beds, three to five sub-district (sector) hospitals 25 to 50 beds each, 12 to 20 midwifery centres and maternity homes, as well as to 20 permanent and temporary nurseries. Moreover, there are organized, for period of 3-4 months at the time of seasonal mass agricultural work, additional facilities, serviced by 'feldshers'. There are also provincial rural hospitals w 200 to 800 beds and provincial epidemiological stations, facilities for air tion of patients are available to each provincial hospital."

Page 75, table 6 insert the following footnote a(1), referring to the heading of table 6 "Attention must be called again to the lack of comparability in many of these For example, many of the 'technikums' in the USSR, which had a total 1,960,400 students in 1955/56 (including 286,400 correspondence students) and are listed under 'middle education' and not under 'higher education' and are excluded from this table (and from the higher enrolment figures in appendix A) enrol students who have had ten years of prior schooling, who attend the technikum for three or four years and who acquire a level of education comparable to that given in 'higher education' institutes in some other countries."

Page 75, last line of table 6 for "USSRF" read "USSR[f]".

Page 78, paragraph 2, line 7 for "6,700" read "3,900".

Page 100, table 6 insert the following footnote b, referring to the heading of table 6 "*Generally* excluding persons seeking work for the first time, and certain others whose industry was not known".

Page 100 for the lines in table 6 relating to Egypt and the United Kingdom, substitute the following

| Country | Period | Changes (thousands) Agriculture | Industry | Services | Total |
|---|---|---|---|---|---|
| Egypt ......... | 1937-47 | - 182 | + 187 | + 366 | + 371 |
| Great Britain .... | 1931-51 | - 115 | + 1,401 | + 322 | + 1,608 |

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## Part II

# PREFACE

esolutions 434 A (XIV) and 585 H (XX) of the Eco-
ic and Social Council requested the Secretary-Gene-
o issue a report on the world social situation further
he *Preliminary Report* published in 1952[1] Resolu-
585 H (XX) also asked the Secretary-General, more
ifically,

> " to place chief emphasis in the next report on changes that have taken place throughout the world since the preliminary report and to give special attention to the problems of peoples undergoing rapid transition especially through urbanization "

1 analysing recent changes in social conditions, the
sent *Report* makes use, as far as possible, of the statis-
l indicators recommended by the Committee of
erts on the International Definition and Measure-
it of Standards and Levels of Living,[2] as modified
r discussion by the Social and Statistical Commis
is and the Economic and Social Council Unfortu-
ely, for much of the world and for many of the com-
ient factors of the level of living, statistical data are
olly or largely lacking, moreover, much of the
istical information that is available is incomplete,
epresentative, or for some other reason lacking
icient comparability to be included in a report of this
e[3]

Vhile many published statistics have not been inclu-
l in this *Report*, even the data that are presented must
regarded with caution, often they are no more than
stimates", lacking precision and continuously subject
reconsideration and revision

[illegible]

cumstances of certain special groups (children deprived
normal family life, the aged, the handicapped, etc ),
wever, these subjects are treated on the introductory
apter or are emphasised in part II of the *Report*, which
concerned with the problems of peoples undergoing
oid transition especially through urbanization

The discussion in part II consists of a general chapter on the social problems of urbanization in economically under-developed areas, followed by two regional chapters, the one on urbanization in Africa south of the Sahara, and the other on urbanization in Latin America There is also an annex containing the conclusions of a seminar on urbanization in the ECAFE region, held in Bangkok in August 1956 under the joint sponsorship of the United Nations and the United Nations Educational, Scientific and Cultural Organization and with the co-operation of the International Labour Organisa tion The full report of the seminar will be published by UNESCO and the present volume therefore does not contain detailed information on urbanization in Asia and the Far East There is also no separate chapter, in part II, on urbanization in the Middle East, for the reason that not enough information could be found, additional to that given in the discussion of the " Middle Eastern Town " in the *Preliminary Report*[4]

As in the case of the *Preliminary Report*, and for the same reasons, the present *Report* does not cover all that may be embraced by the word " social ", but concentrates upon standards and levels of living Furthermore, the emphasis throughout is upon conditions in the economically under developed countries Such emphasis reflects the basic interests of the United Nations and the specialized agencies in the economic and social develop ment of the less developed regions of the world[5]

This *Report* has been prepared in co operation with the International Labour Office, the Food and Agriculture Organization, the United Nations Educational, Scientific and Cultural Organization and the World Health Organization Each of these agencies has contributed material within its field of competence The United Nations Secretariat has assumed responsibility for shortening, revising or rearranging such material for editorial purposes

[1] *Preliminary Report on the World Social Situation*, United
tions publication, Sales No 1952 IV 11

[2] *Report on International Definition and Measurement of Standards*
*l Levels of Living*, United Nations publication, Sales No
54 IV 5

[3] For example, out of nearly one hundred countries and terri-
ies with populations over 500 000 in Africa, Latin America
d Asia, there are only about a dozen with relatively good nation-
de statistics on infant mortality rates judged to be one of the better
licators of the level of living, furthermore, countries or terri-
ies having relatively good statistics on such factors are often
t representative of the geographical region in which they are
cated

[4] Pages 156-161

[5] [illegible] components of the level of living and that now compare favourably in these respects with countries of Europe In general, however, levels of development in the various measurable factors are obviously correlated.

# INTRODUCTION

he world social situation has significantly improved ital sectors since the period covered by the *Preliminary ort* [1] as far as can be judged by the limited evidence able There has been a substantial rise in indices of ith, food consumption, education and income These ,ements reflect, in part, the efforts of Governments voluntary organizations described in the *Inter- Survey of Programmes of Social Development,* [2] as the impact of international and bilateral pro of assistance

ortality rates have continued their decline, particu- , in economically less developed countries Epidemic , which in the past periodically decimated human ulations, have been brought under increasing control industrially advanced countries, health problems e become more and more those of the intractable nerative diseases, and dangers that arise from the nature of the industrial environment, including transport accidents, contamination by industrial ies and radioactivity, have caused growing con

d production and consumption have improved on ld wide basis, although with considerable regional iations In some of the less developed countries, war levels of *per capita* food production may not yet been recovered, partly because of rapid popula growth, recent increases in production, together imports, loans and donations from abroad, have sufficient to eliminate wide scale famines, which ged some areas a few years back, but the problems malnutrition have not been solved Mean e, several of the most highly industrialized countries been continuously faced with food surpluses

significantly greater proportion of the children and in the world are now attending school, and literacy ing up through the age groups Nevertheless, half of the world's children of school going age are not enrolled in schools Popular demands for educa and national needs for specialized personnel are increasing more rapidly than the capacity of the systems At the same time, there is a continuing rld wide debate as to the purposes and functions of education in modern society Education itself tends to instil a questioning attitude, so that, in general, the higher the national educational level the more articulate the questioning of the kinds of education now provided

National income has risen to new heights, with industrial production growing faster than at any previous period in history Real wages have gone up in most of the countries for which data are available, although these are largely the developed countries Consumer prices remained quite stable from mid 1952 until early 1955 or later, particularly in the developed countries, but are again manifesting a definite upward trend in much of the world Where records have been kept, wage-earning employment has generally increased or has been maintained at high levels, conditions of work have been constantly improved and social benefits have been extended to a widening circle of workers and their families

The optimism implied by this general picture of social progress must, however, be qualified

1 While progress has been substantial in the fields indicated, it is still small when compared to the vast extent of poverty and need in the world today, and it represents but a fraction of the potential for human progress that now exists Much more could have been achieved, for example, were it not for a variety of obstacles and competing interests, including political obstacles and competing investments in military defence. Many of the political refugees who posed a social problem in 1950 have now been absorbed but new bodies of refugees have been created as a result of events in Korea and Viet-Nam, as well as Hungary, and the problem of the Palestinian refugees remains unsolved

2 The available data on social progress tend, by and large, to give a favourable bias to the world picture. The existence of statistics on social conditions is apt to be associated with efforts to improve these conditions Where nothing is known, it is more likely that little or no progress has been made

3 The varying increases in national income in the less developed countries have been accompanied, in certain instances at least, by a growing unevenness in the distribution of this income within the population, and by a growing dissatisfaction on the part of groups that have not benefited as much from the rising incomes as they have suffered from the rising prices Frequently, also, increase in average income on a national basis has meant only that part of the labour force has shifted from

The *Preliminary Report on the World Social Situation* was lished in 1952, but information on hand that could be included did not generally go beyond 1950 and in some cases 1948 1949 Correspondingly the period covered by the present ort is roughly 1950-55 but there is considerable variation for factors and for individual countries

*International Survey of Programmes of Social Development,* Nations publication, Sales No 1955 IV 8

rural employment to nominally higher paid urban employment, without there being any rise in the average individual income in the rural or the urban sector, taken separately, furthermore, an improvement in income associated with a shift in employment from subsistence agriculture to paid labour may be an improvement in [illegible] terms but not necessarily in terms of actual [illegible] terms [illegible] have widely served [illegible] ime [illegible] distribution, althoug [illegible] ave been chiefly derived from regressive taxation—which falls heavily upon low income groups—and have been largely absorbed in services available to a limited urban segment of the population

4 The progress achieved has been quite uneven in the different fields of development, as well as in the different countries and population groups it has been characterized by imbalances that may have serious long range implications Housing has probably got worse in much of the world because of rapid urbanization, and there is little reason to believe that any substantial advance has generally been made in the prevention of mental illness or of crime and delinquency

As noted in the *World Economic Survey, 1955*, the increase of national *income per capita* since before the Second World War has been greater in the already advanced countries than in the economically under-developed countries[3] The gap in *per capita* income has therefore widened during that period This has sometimes been interpreted to mean that the gap in levels of living as a whole has also been widening Such an interpretation is not entirely justified

The Committee of Experts on International Definition and Measurement of Standards and Levels of Living concluded,[4] and the Economic and Social Council agreed,[5] that, for purposes of international comparison, the level of living cannot be identified with *per capita* national income On the contrary, it must be approached in a pluralistic manner by analysis of various "components" representing internationally accepted values (health, nutrition, education, housing employment, personal income, etc ) and by the use of various statistical indicators for these components There is no satisfactory way at present of combining the several indicators into a single composite index It follows from this analysis that countries may differ in their rates of progress in the different components, and that the less developed countries as a group may be falling behind the developed countries in some indices but catching up in others This appears to be precisely what has been happening, although the picture is obscured by the difficulty of making international comparisons of rates o[illegible] change[6]

If the gap in *per capita* national income has [illegible] the gap in mortality rates has narrowed If the developed countries have been moving far ahead in the[illegible] consumption of automobiles, television sets, house[illegible] hold appliances and other products of an advanced indu[illegible] trial economy, the less developed countries have [illegible] drawing closer in their *per capita* consumption of calories—as is indeed inevitable if they make any p[illegible] gress at all, since the developed countries have in genera[illegible] already reached or exceeded the optimum level of [illegible] particular index

The rates of progress in the different aspects or com[illegible] ponents of the level of living have depended to an impo[illegible] tant extent upon the economic and social structures [illegible] the different countries Thus, in the economic fiel[illegible] agriculture and manufacturing have each expanded [illegible] about the same rate in under-developed and in develope[illegible] co[illegible]ntries vet the rise in total income has been small [illegible] of total output in the under-developed regions [illegible] similar situation, in reverse, helps explain the more rap[illegible] improvement of health in the under developed countr[illegible] —as measured by decline in crude mortality rates [illegible] have shown little been [illegible] f[illegible] tious diseases account for a much higher proportion [illegible] total deaths in under-developed countries, and therefo[illegible] the impact of their decline upon total mortality rates [illegible] considerable, whereas the economically developed cou[illegible] tries, having to a large extent conquered the infectio[illegible] diseases as a cause of death, have been slowed [illegible] their progress by the degenerative diseases

The drop in death rates in Africa, Asia and La[illegible] America, due large [illegible] ods of control of [illegible] extension of healt [illegible] infant deaths, has not been accompanied by a decline [illegible] birth rates in those regions The factors making f[illegible] lowered birth rates in the industrially developed cou[illegible] tries have not penetrated into the under-developed regio[illegible] as have the factors making for lowered death-rates

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[3] *World Economic Survey 1955* United Nations publication Sales No 1956 II C 1 In the last few years however, available information suggests that the position of the under-developed countries in some areas has considerably improved (See *Economic Survey of Asia and the Far East 1955* United Nations publication, Sales No 1957 II F 1).

[4] *Report on International Definition and Measurement of Standards and Levels of Living*, United Nations publication, Sales No 1954 IV 5

[5] Resolution 585 B (XX).

[7] Cf *World Economic Survey, 1955*, op cit, p 5

rth rates have not only remained high but in some stances appear in fact to have increased Japan, since e Second World War, is an outstanding exception to e trend in Asia, having sharply dropped its fertility vel and reversed its previous tendency toward rapid opulation expansion Meanwhile, in Europe, birth-ites have been relatively stable since 1950 although enerally lower than during the immediate post-war ears While there is today less disparity in birth rates etween the different parts of Europe than in the past, ome parts—for example, Poland, the USSR and Yugo lavia—are maintaining considerably higher levels than he European average, at the same time certain Western European countries have returned to their extremely ow pre war rates—a situation that as in Sweden has aused government concern in connexion with the pro blem of labour shortage In the English speaking coun ries outside Europe (Canada the United States Aus ralia and New Zealand), the relatively high post war birth rates—which rose far above the pre war rates—have generally been maintained, at levels similar to those of Eastern Europe fertility in Canada and the United States has in fact been increasing during the period covered by the present *Report* [8]

As a result of the various fertility and mortality trends, the world population has been growing at an ever accelerating pace during the period under review The present rates of population growth in some of the economically under-developed countries are higher than any that have been known in the history of the human race Increases of 3 per cent per annum are not exceptional at present among these countries Population growth at such rates cannot fail to have important economic and social —and quite possibly political—consequences For example a very high annual rate of investment in schools, hospitals and other forms of social capital becomes necessary

In the economic field during the period under review mbalances in the growth of different parts of the economy have had important social implications In some countries deliberate concentration of investment on heavy industries for purposes of long range develop ment, with much less attention to agriculture housing and consumer industries, has been accompanied by stagnation of the level of consumption, and, in certain cases even by a temporary lowering of that level for large segments of the population, although the total national product meanwhile expanded

In general, and quite apart from government policy, there appears to be an inevitable pressure in a developing economy for income to advance more rapidly in some sectors and among some occupational groups than among others owing to differential rates of growth in productivity or demand or for other reasons Such imbalances may often represent a dynamic factor, leading to desirable change in the occupational structure But they can also lead to unemployment and destitution among groups that are left behind in the changing economy, and, under certain circumstances, to a rising cost of living that adversely affects many other groups as well The growth of productivity, which is central to economic development, commonly takes place at differing rates in the different sectors of the economy, this can lead either to widening gaps in income or to compensatory price rises Thus productivity—the out put per worker—has generally risen more rapidly in manufacturing industries than in services such as trans port and housing or in food production, in some services, such as teaching, the concept of increasing productivity is hardly relevant If the industrial workers share in the benefits of their increased productivity, their income can rise without increase in the price of the goods they produce, but if an equivalent increase in productivity does not take place in transport, housing, or food production, income in these vital sectors will lag behind or else prices will have to be raised to compensate for the lagging pro ductivity—unless the Government provides subsidies (Various other factors can, of course, be responsible for lagging income or inflated prices in these sectors, and in some countries agricultural productivity, for example, has expanded quite rapidly—more rapidly than demand)

While competing pressures to share in the expanding national income—or at least to maintain standards under inflationary trends—may be applied with some effect by groups that produce essential goods and services, other groups, such as aged persons on pensions have much less capacity to exert such economic pressures and have often suffered a declining standard of living or have required special protective action on the part of Governments in order to maintain adequate standards In some of the less developed countries, the situation of the traditional village and small town artisans has become conspicuously difficult, because of the competition of more cheaply produced manufactured goods (often imported) and the limited opportunities for alternative employment

The situation as regards housing is especially serious fro a a social point of view The house building industry has achieved in practice less increase in efficiency and productivity than have most other forms of modern industry The costs of housing have shown strong inflationary tendencies in recent years not only because of growing demand but also because of lagging efficiency In many countries, government measures such as price and rent controls have helped to check increases in the costs of housing to the general public, but at the same time have discouraged new construction and proper maintenance of existing structures and have encouraged the continuation of black market practices Some Governments have adopted more comprehensive programmes involving subsidies in order to provide adequate housing at a price which workers can afford to pay The financing of housing in relation to over all economic and social development has become a matter of increasing international concern [9]

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[8] This becomes more evident if fertility is measured by the number of births per annum for every thousand women of child bearing age rather than by the crude birth rate since the latter relating births to total popul on is affected by increases in the relative size of the child population which result from the fertil ty trend itself

[9] See *Financing of Housing and Community Improvement Programmes* E/CN 5/323 ST/SOA/32.

Housing is one of a series of urgent problems particularly associated with the explosive growth of cities in economically under-developed areas during recent decades The population living in large cities in Africa and Asia, for example, has multiplied more than five times in the present century and promises to continue growing at an extremely high rate

Urbanization in the economically under-developed regions has been proceeding more rapidly than industrialization, the large metropolitan centres have been growing at the expense of smaller towns, and the agrarian economies have often been unable to meet the increased food requirements, so that it has been necessary to import food from abroad, generally from highly industrialized countries The most rapid growth appears to be taking place in the periphery, suburbs or fringe areas of the large cities—this is true also in many developed countries where the expansion of metropolitan areas is creating numerous difficulties but where, however, the suburbs tend to contain the better-off urbanites rather than the poorest of recent migrants

With urbanization, in economically under developed countries, there is usually a transfer of poverty and underemployment from the country to the city, and social ills that have been laid to industrialization or to city life are often but an over flow of rural distress Urbanization also brings, however, in varying degrees, new problems arising from conflicts of culture, disruptions of old customs and patterns of life, difficulties of personal adjustment, disorganizations and reorganizations of social structures The family, in particular, undergoes changes in its size, its functions—losing some functions and strengthening others—and in the status and r its different members The position of children are caught between the new culture and the old, is become especially uncertain and precarious increase of juvenile delinquency, with urbanizati a matter of widespread concern

The rural areas of under-developed countrie poorly integrated, economically and culturally, wi urban areas, and the chasm between the city an village renders difficult the process of transition social problems of urbanization must according considered from a broader point of view than that city alone They are not only problems of ass tion, guidance, stabilization and specific within the city, but also problems of regional p rural advancement, the education and training of youth, and, in general, of balanced economic and s rural and urban, development

Previous reports have examined the extent of and need in the economically under developed reg The present *Report* indicates that progress can be and has been made in recent years, however slow uneven it has been Yet the very process of develop has been creating new problems as it has been so old ones, and the present *Report* demonstrates als need for a much closer integration of economic social objectives than has been yet achieved in countries, much less compartmentalization of tho and much better understanding of the complex of development upon which so many peoples Governments are now basing their hopes for future

# PART I

## Chapter II

# WORLD POPULATION TRENDS

### Introduction

The total world population was estimated at 2,691 million in mid 1955 This marks an increase of 172 million since mid-1951 The distribution of the world's population is estimated as shown in table 1

*Table 1*

ESTIMATED[a] POPULATION OF THE WORLD BY REGIONS IN 1951 AND 1955 (NUMBERS IN MILLIONS)

| *Area* | *1951* | *1955* | *Increase 1951 1955* | *Annual rate of increase (per cent)*[b] |
|---|---|---|---|---|
| World total | 2 519 | 2 691 | 172 | 1 6 |
| Africa | 204 | 223 | 19 | 2 2 |
| America | 337 | 366 | 29 | 2 1 |
| Northern America[c] | 171 | 183 | 12 | 1 7 |
| Middle and South America[c] | 166 | 183 | 17 | 2 4 |
| Asia[d] | 1 384 | 1 481 | 97 | 1 7 |
| Europe[e] | 387 | 409 | 12 | 0 7 |
| Oceania | 13 3 | 14 6 | 1 3 | 2 3 |
| USSR | 184 | 197 | 13 | 1 7 |

[a] Estimates are given for the middle of the year These for 1951 do not agree exactly with the estimates published in the previous report (E/CN 5/267/Rev 1) Many countries have revised their estimates for that year and adjustments for over- [illegible] and under-enumeration have been made

[b] Increase [illegible] ...ome of and by [illegible] ...y since the preparation ...he rates [illegible] of the U[illegible] *Demographic Yearbook 1956*

[c] Northern America Alaska Canada United States St Pierre and Miquelon, Greenland Middle and South Am[illegible] ...emainder of America

[d] [illegible]

[e] [illegible] ...ean

Many of these figures are necessarily crude estimates ...here has been progress, however, in the development of ...opulation statistics during the period under review ...ensuses have been taken in several countries and major ...rritories for which adequate information, even as ...gards the size of the population, was previously lacking, notably in the Chinese Mainland,[1] registration systems have been established in some countries for the first time[2] and the reliability of vital statistics in less developed areas where such data are available has improved in a number of cases

Nevertheless, the vital statistics of most of the less developed countries are very defective in spite of such recent improvements Apart from Europe, the population of European origin overseas, and a small number of countries in Asia, Africa and Latin America, one can say that the vital statistics give practically no information on the level of mortality Comprehensive death registration systems are still lacking in many countries in the latter regions, and where such systems are in operation, under registration of deaths is commonly in the order of 50 per cent Birth registration, where it exists, is generally more satisfactory, but under registration of births is also still an important problem in most Asian, African and Latin American countries

The average world rate of increase of population during the period 1951-1955, estimated at more than 1 5 per cent per annum, is the result of the compounding of rates for regions which differ greatly from that average Middle and South America, some regions of Asia and Oceania show a rate of increase of 2 4 per cent or more, while Europe's rate is below 1 per cent It should be noted that more than one third of the large increase in the population of Oceania is accounted for by net immigration into the two major countries of that area, Australia and New Zealand

The estimated rate of increase of world population from 1951 to 1955 was considerably higher than the average for 1920-1949, which was estimated at about 1 per cent[3] The acceleration of increase has been due, in general terms, to the coincidence of a considerable decline of mortality in almost all countries for which data are known or estimates made, with fertility which has undergone relatively little change In some cases, it seems that a slight increase of fertility has occurred

[1] Also Nepal, Nigeria Cameroons under British Trusteeship

[2] In Burma, the registration system which had broken down during the war time occupation of that country, was partly re established A registration system has been established in Iran, but data for 1954 and the previous years appear to be incomplete

[3] *Demographic Yearbook 1949 50* (United Nations publication, Sales No 1951 XIII 1), p 10

Housing is one of a series of urgent problems particularly associated with the explosive growth of cities in economically under-developed areas during recent decades The population living in large cities in Africa and Asia, for example, has multiplied more than five times in the present century and promises to continue growing at an extremely high rate

Urbanization in the economically under-developed regions has been proceeding more rapidly than industrialization, the large metropolitan centres have been growing at the expense of smaller towns, and the agrarian economies have often been unable to meet the increased

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With urbanization in economically under developed countries, there is usually a transfer of poverty and underemployment from the country to the city, and social ills that have been laid to industrialization or to city life are often but an over flow of rural distress Urbanization also brings however, in varying degrees, new problems arising from conflicts of culture, disruptions of old customs and patterns of life, difficulties of personal adjustment, disorganizations and reorganizations of social structures The family in particular, undergoes changes in its size, its functions—losing some functions and strengthening others—and in the status and role its different members The position of children, are caught between the new culture and the old, is ap become especially uncertain and precarious increase of juvenile delinquency, with urbanization, a matter of widespread concern

The rural areas of under developed countries poorly integrated, economically and culturally, with urban areas, and the chasm between the city and village renders difficult the process of transition social problems of urbanization must accordingly considered from a broader point of view than that of city alone They are not only problems of assimi tion, guidance, stabilization and specific social measu within the city, but also problems of regional plannir rural advancement, the education and training of ru youth, and, in general, of balanced economic and soc rural and urban, development

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rease divided by 4 (the number of years from 1951 to 1955) by the mean population between 1951 and 1955 Some of of increase have been revised sl ghtly since the preparation United Nations *Demograph c Yearbook 1956*

rn America Alaska Canada United States, St Pierre Miquelon Greenland Middle and South America the of America

ncluding Turkey but excluding USSR shown separately below

Excluding the USSR shown separately below, and the European part of Turkey, included in Asia

fany of these figures are necessarily crude estimates has been progress, however, in the development of ılation statistics during the period under review ses have been taken in several countries and major ᵉˢ for which adequate information, even as , the size of the population, was previously lacking, notably in the Chinese Mainland,[1] registration systems have been established in some countries for the first time [2] and the reliability of vital statistics in less developed areas where such data are available has improved in a number of cases

Nevertheless, the vital statistics of most of the less developed countries are very defective in spite of such recent improvements Apart from Europe, the population of European origin overseas, and a small number of countries in Asia, Africa and Latin America, one can say that the vital statistics give practically no information on the level of mortality Comprehensive death registration systems are still lacking in many countries in the latter regions, and where such systems are in operation, under registration of deaths is commonly in the order of 50 per cent Birth registration, where it exists, is generally more satisfactory, but under-registration of births is also still an important problem in most Asian, African and Latin American countries

The average world rate of increase of population during the period 1951-1955, estimated at more than 1.5 per cent per annum, is the result of the compounding of rates for regions which differ greatly from that average. Middle and South America some regions of Asia and Oceania show a rate of increase of 2.4 per cent or more, while Europe's rate is below 1 per cent. It should be noted that more than one third of the large increase in the population of Oceania is accounted for by net immigration into the two major countries of that area, Australia and New Zealand

The estimated rate of increase of world population from 1951 to 1955 was considerably higher than the average for 1920-1949, which was estimated at about 1 per cent [3] The acceleration of increase has been due, in general terms, to the coincidence of a considerable decline of mortality in almost all countries for which data are known or estimates made, with fertility which has undergone relatively little change In some cases it seems that a slight increase of fertility has occurred

[1] Also Nepal N geria, Cameroons under British Trusteeship

[2] In Burma the registration system which had broken down during the war t me occupation of that country, was re-established A registration system has been established in ... but data for 1954 and the previous years appear to be ...

[3] *Demograph c Yearbook 1949-50* (United Nations publication, Sales No 1951.XIII.1), p 10

recently [4] and in some other cases a decline of fertility has been noted. But these variations do not very much affect the world picture.

The density of population per square kilometre is given in table 2. In considering the figures of this table, one must bear in mind the limitations of comparisons between them because of differences in the quality of land. This point was analysed in detail in the former report.[5]

*Table 2*

ESTIMATED NUMBER OF INHABITANTS PER SQUARE KILOMETRE FOR REGIONS OF THE WORLD 1955

| Area | Population in mid-1955 (millions) | Area [a] (thousands of km²) | Population per km² |
|---|---|---|---|
| WORLD | 2 691 | 135 167 | 19 9 |
| Africa | 223 | 30 284 | 7 4 |
| America | 366 | 42 078 | 8 7 |
| Northern America | 183 | 21 483 | 8 5 |
| Middle and Southern America | 183 | 20 595 | 8 9 |
| Asia [b] | 1 481 | 27 049 | 54 8 |
| Europe [c] | 409 | 4 928 | 83 0 |
| Oceania | 14 6 | 8 557 | 1 7 |
| USSR | 197 | 22,271 | 8 8 |

[a] Including land area and inland waters but excluding uninhabited polar regions and some uninhabited islands

[b] Including Turkey but excluding USSR shown separately below

[c] Excluding USSR shown separately below and the European part of Turkey, included in Asia

FERTILITY

For measuring the level of fertility the crude birth-rate (births per 1,000 total population) will be used. Although it is an imperfect index, being affected by the age composition of the population, which varies from one country to another and from one period to another, it is usually employed because the data needed to compute it are available for a large number of countries. In effect, the level of fertility is determined by the behaviour of couples during the child bearing period when the wife is between fifteen and forty four years of age. It would therefore be better, if the necessary data were available, to compare "general fertility rates, i e, the annual number of births per 1,000 women fifteen to forty four years old. But the defects of the crude birth rate should not be exaggerated. Except in very special cases the ratio of the general fertility rate to the crude birth rate ranges in practice from 5 0 to 4 5. Therefore, with some exceptions, the use of the crude birth rate instead of the general fertility rate for measuring the level of fertility produces a maximum error of 10 [...] cent. The direction of the error is, in general, towar[ds] understatement of the fertility of adults in countr[ies] where children constitute a large proportion of the pop[u]lation. This implies, among other things, that the diff[er]ences in adult fertility between developed and und[er]developed countries are slightly greater than even t[he] crude birth rates would appear to indicate.

The crude birth rate may also give a somewhat m[is]leading impression regarding fertility trends in individ[ual] countries. A rapid increase in the fertility of marr[ied] couples in time produces a change in population stru[cture] with a larger percentage of the population consisti[ng] of children, the increase in the relative number of ch[il]dren may affect the crude birth-rate in such a way as [to] suggest a lowering or slowing down of fertility rates [of] adults when this is actually not the case.[6]

In general, the crude birth rates have shown no l[arge] changes in the period 1951 to 1955, this relative stabil[ity] being their most remarkable feature. There are som[e] exceptions to that rule, which are specially analy[sed] later.

*Table 3*

ANNUAL REGISTERED CRUDE BIRTH RATES [a] FOR SOME COUNTRIES [OF] AFRICA WITH RELATIVELY GOOD STATISTICS [b]

| Country | Period | Annual birt[hs] per 1 000 population [c] |
|---|---|---|
| Algeria Moslem population | 1951 53 | 41 |
| Egypt | 1951 | 45 |
| Mauritius | 1951 54 | 46 |
| Northern Rhodesia | 1950 | 59 [d] |
| Ruanda Urundi | 1955 | 46 [e] |

[a] *Note* In this table and throughout the remainder of th[is] chapter only countries with a population of 500 000 or more a[re] considered. Fairly reliable vital statistics are available for smaller countries and territories in Africa and other regio[ns]. Reliable statistics are also available for small European or minorities in some countries of Africa, but they are not [given] here because they are not representative of the whole popula[tion] of the countries concerned

[b] *Source Demographic Yearbook 1955* United Nations publ[ica]tion Sales No 1955 XIII 6

[c] Rates are presented in integral numbers in order to av[oid] giving the impression of greater accuracy than they possess

[d] According to a sample census taken in 1950. This rate se[ems] very high and should be confirmed by other surveys before be[ing] accepted

[e] *Rapport soumis par le Gouvernement belge à l'Assem[blée] générale des Nations Unies au sujet de l Administration du Rua[nda] Urundi pendant l année 1955*, Bruxelles 1956

[4] In fact, the *registered birth-rate* has increased recently in many under-developed countries but in most cases the increase may reflect mainly or solely an improvement in birth registration

[5] *Preliminary Report on the World Social Situation* United Nations publication, Sales No 1952 IV 11

[6] Thus the post war "baby boom" in the United States [...] been chang[...] [...] way as to co[...]

every 1 000 women aged fifteen to forty four increased [...]

*Fertility in Africa*

' ' vital statistics for most countries in Africa available The numbers of births and deaths ng to official registers are systematically under- From the official birth-rates for some countries region, whose statistics are considered not too the conclusion can be drawn that the birth- this continent lie mostly in the wide range from to fifty per thousand population, and perhaps fifty in some instances The countries considered birth-rates are listed in table 3

*Fertility in Asia*

'sia also, only a few countries have reliable vital The crude birth-rates for those countries with e data are shown in table 4

*Table 4*

ANNUAL BIRTH-RATES (PER 1,000 POPULATION) FOR SOME IN ASIA WITH RELATIVELY GOOD STATISTICS *

| | 1947-49 average | 1950-52 average | 1953-55 average |
|---|---|---|---|
| | 40 0 | 40 1 | 37 8 |
| Taiwan | 41 0 * | 46 3 | 45 0 |
| | 31 1 | 28 7 | 26 1 |
| Jewish population) | 28 8 | 32 4 | 28 2 |
| | 33 6 | 25 7 | 20 4 |
| Islands | 45 2 * | 41 1 * | 30 6 |
| (Federation of) | 42 4 | 43 3 | 43 5 |
| | 46 4 | 46 5 | 48 7 |

urces United Nations, *Demographic Yearbook 1955*, and y *Bulletin of Statistics*

-49.

only

only

official estimates of birth-rates have been computed countries in Asia which have incomplete vital but where several censuses have been taken a long period of years [7] These estimates are pre-sented in table 5, together with estimates and registration data for several countries listed in table 4 in which registration appears to be more complete.

*Table 5*

ANNUAL CRUDE BIRTH RATES (PER 1,000 POPULATION) ACCORDING TO OFFICIAL REGISTRATION AND UNOFFICIAL ESTIMATES FOR CERTAIN COUNTRIES IN ASIA *

| Country | Official registration: Period | Official registration: Annual rate | Unofficial estimates: Period | Unofficial estimates: Annual rate |
|---|---|---|---|---|
| Burma | 1951-54 | 48 * | 1950-55 | About 45 |
| Ceylon | 1950-55 | 39 | 1950-55 | About 40 |
| China: Taiwan | 1950-55 | 46 | 1950-55 | About 50 |
| Cyprus | 1950-54 | 28 | 1950-55 | About 30 |
| India | 1950-52 | 25 | 1950-55 | About 40 |
| Pakistan | 1950-51 | 20 | 1950-55 | About 50 |
| Philippines | 1950-53 | 22 | 1950-55 | About 50 |
| Thailand | 1950-53 | 29 | 1950-55 | About 50 |
| Turkey | | | 1950-55 | About 40 |

Source of registration data. United Nations, *Demographic Yearbook*

* Israel, Japan, Ryukyu Islands, Federation of Malaya and [illegible]

populations

[illegible]

incomplete" registration may actually have nearly complete statistics The *Demographic Yearbook* shows for each country whether or not the national authorities regard the statistics of births and deaths as complete or incomplete, but without any [illegible]

rather than by year of occurrence are.

| | |
|---|---|
| Argentina | Honduras |
| Australia | Ireland |
| Ceylon | Israel |
| Chile | Mauritius |
| China Taiwan | Mexico |
| Colombia | New Zealand |
| Cuba | Nicaragua |
| Ecuador | Paraguay |
| Egypt | Peru |
| El Salvador | Singapore |
| Greece | Thailand |
| Guatemala | Trinidad and Tobago |
| | Venezuela |

and (for deaths only):

Costa Rica — Dominican Republic

[7] The method of estimating the vital rates of a population that bited a fairly constant composition by ages in different ... to match the given population with a model stable ... [illegible]

gration was known to be relatively ... to these special factors computed with due consideration ... method are reliable, ...ough in ...derable errors derived ...stration ...parently of the ...parently

As a consequence of the lack of adequate data, only a wide range can be established for Asian countries—as was done for African countries—within which the birth-rates must reasonably be located With the significant exceptions of Japan, Ryukyu Islands, Cyprus, and Israel —which are not representative of the majority of the population of Asia—the range indicated by the data is similar to that established for Africa, the birth rates being above forty and, in some cases, probably reachin levels over fifty per thousand population

In some countries—Federation of Malaya, Singapo and Taiwan—the registered crude birth rates for 1950-5 and 1953 55 are higher than those for 1947-49 As sugge ted by the annual figures in table 6, however, the risi trend seems to have stopped in Malaya and Singapor and a slight decrease is observed in Taiwan after 195

*Table 6*

REGISTERED CRUDE BIRTH RATES PER 1 000 POPULATION IN THREE ASIAN COUNTRIES 1950-55

| Country | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 |
|---|---|---|---|---|---|---|
| China Taiwan | 42 5 | 49 9 | 46 6 | 45 3 | 44 5 | 45 3 |
| Federation of Malaya | 42 0 | 43 6 | 44 4 | 43 7 | 43 8 | 43 0 |
| Singapore | 45 7 | 46 2 | 47 5 | 48 7 | 48 9 | |

*Source* United Nations *Monthly Bulletin of Statistics*

The decline of mortality in these countries—as well as improved registration or increase in true fertility—could be responsible for observed increases of their birth rates between 1947-49 and 1953 55 When mortality declines, the effect is to reduce the proportion of marriages that are dissolved by death of the husband or the wife before their child bearing period is ended, in other words, to increase the proportion of married people among the population of each adult age group, particularly if re marriage is not very common Consequently, the birth rates can increase even if the fertility of the married people does not change [a] It would be necessary to have detailed data on the fertility of married couples to understand the real meaning of the increases observed in the crude birth rates of these countries

*Table 7*

REGISTERED CRUDE BIRTH-RATE (PER 1 000 INHABITANTS) IN JAPAN 1950-1956

| Year | Birth-rate |
|---|---|
| 1950 | 28.2 |
| 1951 | 25 4 |
| 1952 | 23 5 |
| 1953 | 21 5 |
| 1954 | 20 1 |
| 1955 | 19 4 |
| 1956 | 19 0 [a] |

*Source* United Nations *Monthly Bulletin of Statistics*
[a] Estimate based on data for the months January August

[a] Some calculations made on theoretical population models have shown that one can expect a maximum increase of up to 10 per cent in the birth-rate when the expectation of life at birth increases from thirty to sixty years if re-marriage is common, the percentage will be lower

Fertility in Japan during recent years deserves spe attention Wide use of contraception and a large nu ber of induced abortions (legally permitted by Eugenic Protection Law passed in 1948) are clea reflected in the trend of the Japanese birth rate rate declined continuously from 1950 to 1955, monthly rates which are now available up to Aug 1956, show that the decline has continued in 1956 ( table 7) The crude birth rate has dropped below 20 1,000 and is now entirely out of the range of most As countries A decline has also taken place in the Ryu Islands which formerly belonged to Japan

The present low level of the birth rate in Japan more remarkable because Japan, unlike the countries of low fertility, still has a comparat population—that is, a population with a relati proportion of young adults of reproductive increase in the percentage of older people, w resulted from low birth rates continuing period in the Western countries, has not yet Japanese population to a large extent Th of this factor is illustrated by the compar Japan and France in table 8, where fert both by the crude birth rates and by tility rates (annual numbers of births 15 to 44 years old) for 1935, 1950, and latter basis, Japan had slightly lower by 1954, though the French birth the relatively large proportion of France, was lower than the Japanese

Japanese fertility, however it is lower than that of many Western example, both the crude birth rate and rate of the Japanese population were than corresponding measures for the 1954 (table 8) This was the fertility in the United States pos Japanese fertility fell

*Table 8*

COMPARATIVE FERTILITY IN JAPAN, FRANCE AND THE UNITED STATES CRUDE BIRTHS RATES (PER 1,000 POPULATION) AND GENERAL FERTILITY RATES (BIRTHS PER 1,000 WOMEN 15 TO 44 YEARS OF AGE), 1935, 1950 AND 1954

| *Year and fertility measure* | *Japan* | *France* | *United States* |
|---|---|---|---|
| Crude birth rate | | | |
| 1935 | 31.7 | 15.3 | 18.7 |
| 1950 | 28.2 | 20.7 | 23.5 |
| 1954 | 20.1 | 18.9 | 24.6 |
| Total fertility rate | | | |
| 1935 | 143 | 70 • | 76 • |
| 1950 | 121 | 98 | 106 |
| 1954 | 85 | 94 | 118 |

*Sources* United Nations, *Demographic Yearbook* and *Monthly Bulletin of Statistics* and official statistics supplied by Governments

• 1936

### *Fertility in Middle and South America*

For most countries in this region, birth rates are

iddle and South America have been computed by the thod described above for Asian countries [9]

*Table 9*

NNUAL REGISTERED CRUDE BIRTH RATES (PER 1,000 POPULATION) FOR COUNTRIES IN MIDDLE AND SOUTH AMERICA WITH RELATIVELY GOOD STATISTICS ON BIRTHS

| ountry | 1947-49 | 1950-52 | 1953 55 |
|---|---|---|---|
| rgentina • | 25.1 | 25.1 | 24.2 • |
| hile | 35.3 | 33.5 | 34.4 |
| cuador | 46.2 | 47.0 | 45.0 |
| l Salvador | 46.0 | 48.7 | 48.0 |
| uatemala | 51.9 | 51.4 | 50.5 |
| londuras | 39.4 | 40.4 | 42.8 |
| amaica | 31.6 | 33.3 | 35.3 |
| lexico | 44.9 | 44.6 | 45.9 |
| uerto Rico • | 40.5 | 37.6 | 35.0 |
| rinidad and Tobago • | 38.5 | 36.3 | 40.3 |
| enezuela | • | 43.4 | 46.6 |

Source United Nations, *Demographic Yearbook* and *Statistical Papers, Series A*

• For Argentina, Puerto Rico and Trinidad and Tobago, no check was made to evaluate the completeness of registration.

• Although the official rates for Venezuela 1950-52 and 1953 55, appear to be reliable on the basis of the criterion described in the text, those for 1947-49 appear less reliable and are not shown here

• 1953 54

ee footnote 7

Two tables are presented for the region In the first (table 9), countries with fairly complete statistics are included and the average registered crude birth rates for 1947-49, 1950 52 and 1953-55 are given in order to show any significant changes between the periods In the second table (table 10), estimates of the crude birth-rates are compared with the registered rates Countries in this table are presented in two groups, the first consisting of countries with relatively good statistics that correspond with the theoretical estimates and the second of countries with "apparently incomplete" [9] vital statistics or with no such statistics at all

*Table 10*

ANNUAL CRUDE BIRTH RATES (PER 1,000 POPULATION) ACCORDING TO OFFICIAL REGISTRATION AND UNOFFICIAL ESTIMATES FOR COUNTRIES IN MIDDLE AND SOUTH AMERICA 1950-55 •

| *Country* | *Registered* | *Estimated* |
|---|---|---|
| (Countries with relatively good statistics) | | |
| Argentina | 25 • | |
| Chile | 34 • | About 40 |
| Ecuador | 46 | About 45 |
| El Salvador | 48 | About 50 |
| Guatemala | 51 | About 50 |
| Honduras | 41 • | About 45 |
| Jamaica | 34 | About 40 • |
| Mexico | 45 | About 45 |
| Puerto Rico | 36 | |
| Trinidad and Tobago | 38 | |
| Venezuela | 45 | About 45 |
| (Countries with apparently incomplete statistics) | | |
| Bolivia | 39 • | About 45 |
| Brazil | | About 45 |
| Colombia | 37 • | About 45 |
| Costa Rica | 39 • | About 45 |
| Cuba | | About 35 |
| Dominican Republic | 40 | About 50 |
| Nicaragua | 42 • | About 50 |
| Panama | 36 | About 45 |
| Paraguay | | About 45 |
| Peru | - 33 | About 45 |

*Sources of registration data* United Nations, *Demographic Yearbook* and *Monthly Bulletin of Statistics*, and data supplied by Governments

footi

Uru

rate

regis

regis ... are aged ... per 1,000

• 1950-54

• Adjusted for under registration of births

• For Jamaica, emigration may partly explain the difference between the registered and the estimated rates

• 1951-53

[9] See footnote 7.

The following conclusions can be drawn from these tables

(1) Argentina and apparently Uruguay, with crude birth rates of about 25 or below, resembled Northern America so far as their fertility is concerned, and mark a great departure from the mean of the Latin American region which is much higher Many reasons may explain the difference the great influence of immigration, together with a relatively high level of education, urbanization and industrialization

(2) Generally speaking fertility in Middle America seems to be higher than in South America In Central America, three countries have a birth rate of about 50 per thousand a level which is not reached in South America In the Caribbean Islands the range of variation appears to be very large One finds there both very high and relatively moderate birth rates (about 35 per thousand for Cuba and Puerto Rico and 50 per thousand for the Dominican Republic)

(3) In most countries in table 9 no significant change in birth rates is noted between 1947-49 and the more recent periods exceptions are Puerto Rico, which has experienced a relatively sharp decline and Honduras, Jamaica and Trinidad and Tobago where increases have been recorded

The case of Puerto Rico the most industrialized of the Caribbean Islands deserves special attention Table 11 shows the annual registered Puerto Rican birth rates for the years 1947 55 with an estimate for 1956 based on data for the first five months of the year A persistent downward trend appears throughout the ten year period

*Table 11*

REGISTERED CRUDE BIRTH RATES (PER 1 000 POPULATION) IN PUERTO RICO 1946-1956

| Year | Birth-rate |
|---|---|
| 1947 | 42.2 |
| 1948 | 40.2 |
| 1949 | 39 0 |
| 1950 | 39 0 |
| 1951 | 37 6 |
| 1952 | 36 1 |
| 1953 | 35 1 |
| 1954 | 35 0 |
| 1955 | 34 8 |
| 1956 | 34.2 * |

Source United Nations Monthly Bulletin of Statistics
* Estimate based on data for the months January May

It has already been noted how declining mortality which was present in Puerto Rico during this period can produce a rising birth rate On the other hand emigration can depress the birth rate by draining off the most fertile element of the population, that is, you[ng] adults Emigration was a major factor in the demog[ra]phy of Puerto Rico during the period considered B[ut] there are some reasons for supposing that the fertil[ity] decline was due at least partly to a reduction in t[he] specific fertility rates of child bearing women [An] increase of education and a shift from agriculture [to] industry—both of which have been proceeding at a rap[id] rate in Puerto Rico—are conducive to a decrease in t[he] size of families Lack of detailed statistics prevents a measure of the extent to which family size may ha[ve] decreased

*Fertility in Europe*

Before the Second World War (1935 39) rather w[ide] differences in fertility were to be found among the cou[n]tries of Europe (table 12)

One group of countries located in Western and Nor[th]ern Europe had pre war crude birth rates of about [...] per thousand The numbers of births each year in th[ese] countries exceeded the numbers of deaths by only [a] narrow margin and for most of these countries fertil[ity] [...]

At the opposite extreme two groups of countries [in] Europe had birth rates in the range of 25 to 30 [per] thousand The first of these two groups compris[ed] Bulgaria, Poland, Romania, the USSR and Yugoslav[ia] The second group was made up of Mediterranean cou[n]tries Spain, Portugal and Greece The level of fertil[ity] observed at that time in these two groups of countr[ies] had also been reached by a decline from still higher leve[ls] but the downward trend in these countries had not be[en] under way so long as in the first group

In some countries of Europe the birth rates we[re] intermediate between the low level of the first group a[nd] the high level of the second and third Czechoslovaki[a,] Denmark, Finland Hungary, Ireland and the Nethe[r]lands had crude birth rates between 17 and 20 p[er] thousand Although their fertility was clearly highe[r] than that of the countries included in the first grou[p] mentioned above the e six countries could be include[d] in the category o[...] re war fertility The[y] are listed togeth[...] roup of countries i[n] table [...] occupied a positio[n] [...] Spain, Portug[al] [...] than th[e] [...] the tab[le] tog[...]

A [...] cr [...] mc

thousand now represents the typical level for this group The greatest increases are found in France and Norway In general, it appears that the decline of fertility in the countries of the first group has ceased at least for the time being The same phenomenon is observed in the six countries of somewhat higher pre war fertility (Czechoslovakia, Denmark, Finland, Hungary, Ireland, and the Netherlands)

*Table 12*

ANNUAL REGISTERED CRUDE BIRTH RATES (PER 1 000 POPULATION) FOR EUROPEAN COUNTRIES FOR SELECTED PERIODS 1930-1953*

| Country | 1930-34 | 1935-39 | 1947-49 | 1950-52 | 1953-55 |
|---|---|---|---|---|---|
| | *Group I (low pre war fertility)* | | | | |
| Austria | 15 1 | 14 7 | 17 5 | 15 1 | 15 1 |
| Belgium | 17 6 | 15 5 | 17 5 | 16 7 | 16 7 |
| ance | 17 3 | 15 1 | 22 0 | 19 9 | 18 8 |
| Germany | 16 3 | 19 4 • | | | |
| Eastern Germany • • | | | 13 1 | 16 8 • | 16 3 |
| Western Germany | | | 16 6 | 15 9 | 15 6 |
| Norway | 15 7 | 15 0 | 20 5 | 18 8 | 18 6 |
| Sweden | 14 4 | 14.5 | 18.2 | 15 8 | 14 9 |
| Switzerland | 16 7 | 15 4 | 19 0 | 17 6 | 17 0 |
| United Kingdom | 15 8 | 15 3 | 18 6 | 15 9 | 15 6 |
| Czechoslovakia | 19 7 | 17 1 | 23 1 | 22 8 | 21 3 |
| Denmark | 17 9 | 17 9 | 20 4 | 18 1 | 17 5 |
| Finland | 20 0 | 20 2 | 27.2 | 23 5 | 21 5 |
| Hungary | 23 2 | 20 1 | 20 7 | 20 3 | 22 0 |
| Ireland | 19 5 | 19 4 | 22 3 | 21 5 | 21 2 |
| Netherlands | 21 7 | 20 3 | 25 6 | 22.5 | 21 6 |
| | *Group II (high pre-war fertility)* | | | | |
| Bulgaria | 30 3 | 24 1 | 24 2 • | 21 0 • | 20 3 |
| Poland | 28 9 | 25 4 • | 28 4 | 30 6 | 29 3 |
| • | 33 7 | 30.2 | 22 4 • | | 23 7 • |
| USSR • | | about 30 | | 26 6 | 25 7 |
| Yugoslavia | 33 0 | 27 9 | 28 3 | 29 1 | 27 9 |
| | *Group III (high pre-war fertility)* | | | | |
| • | 30 0 | 26 8 | 18 6 • | 19 9 | 19 0 |
| ugal | 29 3 | 27 1 | 25 6 | 24 5 | 23 3 |
| pain | 27 6 | 22.0 • | 22.2 | 20 4 | 20 4 |
| Italy | 24 5 | 23.2 | 21.5 | 18 6 | 18 0 |

Demographic Yearbook and Monthly the rates for 1950-52 and tistical Yearbook of Poland from Narodnoe Khozyaistvo 3

• Territories as of date

• The birth rate for the period 1935-39 was temporarily inflated a result of political factors

• Including East Berlin for 1951 55

• No information obtained from country on completeness of gistration.

• 1951 52

• 1947-48

• 1951 52.

• 1935-38

• 1947 only

• 1953 only

• Rates are understated—registration of births is officially reported as incomplete

• 1949

• The birth-rate for the period 1935-39 was lowered as a result of the civil war

Among the countries in the Eastern group of relatively gh pre war fertility, the decline of the birth rate has ontinued in Bulgaria, Romania and the USSR In o of these three countries (Romania and the USSR), fertility seems to be stabilized for the time being at a birth rate near 25 per thousand For Bulgaria there is also a stabilization, but about 20 per thousand On the other hand, in Yugoslavia and Poland, practically

no decline has been observed, the birth rates of these two countries remain near 30 per thousand

In the Mediterranean countries the birth rates have continued to decline and now fertility in these countries is not far from the average level for the first group of lowest pre war fertility The most recent yearly rates (table 12 group III) indicate that in the Mediterranean group as in other European countries at least a temporary stabilization seems to have occurred

*Fertility in Canada, the United States, Australia Zealand and European population of the Unio South Africa*

The comparison of the crude birth rates for 194 1950 52 and 1953 55 for these countries (table 13) re a stabilization of fertility at a level similar to that o ved in Eastern Europe A slight increase can be obs in the rates for Canada and the United States since

*Table 13*

ANNUAL REGISTERED CRUDE BIRTHS RATES (PER 1 000 POPULATION) IN CANADA THE UNITED STATES AUSTRALIA NEW ZEALAN UNION OF SOUTH AFRICA FOR SELECTED PERIODS 1930-55

| Country | 1930-34 | 1935 39 | 1947-49 | 1950-52 | 1953- |
|---|---|---|---|---|---|
| Union of South Africa (European population) | 23 6 | 24 7 | 26 6 | 25 1 | 25 |
| Canada ᵃ | 22 2 | 20 3 | 27 8 | 27 4 | 28 |
| United States ᵇ | 19 7 | 18 8 | 25 6 | 24 7 ᶜ | 25 |
| Australia ᵈ | 17 6 | 17 2 | 23 4 | 23 2 | 22 |
| New Zealand (European population) | 17 5 | 17 4 | 25 9 | 24 6 | 24 |

*Sources* United Nations *Demographic Yearbook* and *Monthly Bulletin of Statistics* and official statistics supplied by Governments

ᵃ Excluding Yukon and Northwest Territories and prior to 1950 Newfoundland.

ᵇ Rates are adjusted for under registration of births

ᶜ Beginning in 1951 final rates are based on a 50 per cent of births

ᵈ Excluding full blooded aborigines estimated at 47 000 i

MORTALITY

For summarizing the conditions of mortality in various parts of the world three measures will be used

(*a*) The crude death rate i e the annual number of deaths per 1 000 inhabitants

(*b*) The infant mortality rate i e the number of deaths under one year of age per 1 000 live births

(*c*) The expectation of life at birth i e the average number of years to be lived by a new born child

Each of these indices has its advantages and draw backs The first one—the crude death rate—does not give a perfect measure of the level of mortality because it is influenced by the age composition of the population (thus a higher proportion of aged persons implies a higher crude death rate other things being equal) But in countries with poor statistics it is often the only index that it is possible to obtain

The infant mortality rate—by definition of limited coverage—is not only an index of mortality as such, it is also an important indicator of the level of living For example the care given to infants is related to the level of education as well as to health conditions

The expectation of life at birth is the best synthetic index of mortality it reflects mortality experience at all age levels and is free of influence from the age composition of the population Unfortunately many countries do not have the data required for its calculation

*Crude death rates*

Mortality is closely related to age Except f first period of life (from birth to the age of ten or years) the mortality rates of the successive rise constantly, the increase accelerating more and as age advances As a result, the age distribution population greatly influences the crude death rate, is a mean value of the age specific mortality rates ted by the number of people in each age group crude rate is a satisfactory index of mortality o comparisons of populations with similar age tions—the population of the same country over a period of time, or of two or whic followed approximately the tion in the

It is useful dea of the error means of the w in age d comparison

The past tion, tion m called lated for

ersely) by life expectation, is seventy years, then 21 cent of the population will be in the 0-14 year age-up, and 20 per cent will be aged sixty or over If, ever, the crude birth rate is 45 per 1,000, then with same mortality level of seventy years, 49 per cent of population will be aged 0 14, and only 4 per cent be sixty years or older [10] The crude death rate in first of these instances will be 14 per 1,000 of total ulation, and in the second instance it will be only 5 1,000, although the mortality level, as measured by expectation, is exactly the same in both cases In er words, through its effect on the age distribution, fertility level can have a quite considerable influence the crude death-rate [11] These facts must be borne in d in interpreting the crude death rates discussed ow They help to explain why some of the less eloped countries with high fertility rates now have de death-rates as low as or lower than those of devel-d countries, although their mortality as measured ersely) by life expectation is considerably higher and r health standards have not yet reached those of the re developed countries

### *Crude death-rates in Africa*

The registration of deaths in Africa is even more dequate and fragmentary than that of births It officially admitted that the registration is incomplete affected by irregularities in many countries In some es registration of deaths is not compulsory Several mples will suffice to show the deficiencies of the data

If the annual rate of increase of the Moslem population of Algeria between 1948 and 1954—for which years census counts of the population are available—is subtracted from the average registered birth-rate, the result may be considered as an estimate of the average crude death-rate (the effect of migration being assumed to be negligible) This estimate works out to 21 per 1,000 against 14—the mean of the registered death-rates between 1949 and 1953 The error in the registered figures is probably greater, because births also are somewhat under-registered and consequently the birth-rate is under stated

When registered death-rates for some African countries (for example Mozambique, Angola, Tunisia) are compared with the rates for some Asian countries also subject to high fertility and having reliable vital statistics (for example Ceylon, Federation of Malaya, Singapore) the African death rates appear to be much lower There can be no doubt, however, that mortality is actually lower in the Asian than in the African countries in question

In the circumstances, it is impossible to get a good estimate of present death-rates in Africa as a whole Nevertheless, from estimates of the demographic characteristics of some countries a range can be derived within which the typical death rates for African countries probably lie The limits of this range are 20 and 30 per thousand population, the upper limit being, perhaps, more representative of average mortality than the lower.

Difficult as it is to fix the limits of present death-rates, it would be still more speculative to try to ascertain the

[10] The following table gives additional figures showing stable age distribution in terms of the percentages of the population in different groups for four levels of fertility (crude birth rates of 15, 25, 35, and 45) and two levels of mortality (life expectations of 30 years 70 years)

| Crude b rth rate (per 1 000 population) | Percentage of population aged 0-14: Life expectation of 30 years (per cent) | Percentage of population aged 0-14: Life expectation of 70 years (per cent) | Percentage of population aged 15-59: Life expectation of 30 years (per cent) | Percentage of population aged 15-59: Life expectation of 70 years (per cent) | Percentage of population aged 60 and over: Life expectation of 30 years (per cent) | Percentage of population aged 60 and over: Life expectation of 70 years (per cent) |
|---|---|---|---|---|---|---|
| | 17 | 21 | 65 | 59 | 18 | 20 |
| | 26 | 32 | 63 | 57 | 11 | 11 |
| | 33 | 41 | 60 | 52 | 7 | 7 |
| | 40 | 49 | 56 | 47 | 4 | 4 |

The stable age distribution is shown to be determined mainly by the level of fertility The variation of mortality does not affect it y much The level of fertility can therefore be taken, in these stable populations, as an index of the age composition

[11] The following table shows variations in crude death rates in countries at several different levels of stabilized fertility and mortality

*Annual crude death rates (per 1,000 population) of populations submitted for a long period of time to given levels of mortality and fertility*

| Level of fertility (annual crude birth-rate per 1,000 population) | Level of mortality (Expectation of life at birth, in years): 30 | 40 | 50 | 60 | 70 |
|---|---|---|---|---|---|
| | 40 | 30 | 23 | 18 | 14 |
| | 35 | 25 | 18 | 13 | 8 |
| | 33 | 23 | 16 | 11 | 6 |
| | 33 | 23 | 16 | 10 | 5 |
| | 35 | 24 | 16 | 9 | 4 |

It can be seen from this table that with high mortality (short expectation of life) the variations due to fertility are relatively small it not so with low or moderate mortality

no decline has been observed, the birth rates of these two countries remain near 30 per thousand

In the Mediterranean countries, the birth rates have continued to decline and now fertility in these countries is not far from the average level for the first group of lowest pre war fertility The most recent yearly rates (table 12 group III) indicate that in the Mediterranean group, as in other European countries at least a temporary stabilization seems to have occurred

*Fertility in Canada, the United States, Australia, N Zealand and European population of the Union South Africa*

The comparison of the crude birth rates for 194 1950-52 and 1953 55 for these countries (table 13) re a stabilization of fertility at a level similar to that ob ved in Eastern Europe A slight increase can be obse in the rates for Canada and the United States since 1

*Table 13*

ANNUAL REGISTERED CRUDE BIRTHS-RATES (PER 1 000 POPULATION) IN CANADA THE UNITED STATES, AUSTRALIA, NEW ZEALAND UNION OF SOUTH AFRICA FOR SELECTED PERIODS 1930-55

| Country | 1930-34 | 1935 39 | 1947-49 | 1950-52 | 1953-5 |
|---|---|---|---|---|---|
| Union of South Africa (European population) | 23 6 | 24 7 | 26 6 | 25 1 | 25 4 |
| Canada [a] | 22 2 | 20 3 | 27 8 | 27 4 | 28 4 |
| United States [b] | 19 7 | 18 8 | 25 6 | 24 7 [c] | 25 : |
| Australia [d] | 17 6 | 17 2 | 23 4 | 23.2 | 22.7 |
| New Zealand (European population) | 17 5 | 17 4 | 25 9 | 24 6 | 24 ( |

*Sources* United Nations *Demographic Yearbook* and *Monthly Bulletin of Statistics* and official statistics supplied by Governments

[a] Excluding Yukon and Northwest Territories and prior to 1950 Newfoundland

[b] Rates are adjusted for under registration of births

[c] Beginning in 1951, final rates are based on a 50 per of births

[d] Excluding full blooded aborigines estimated at 47 000 ir

MORTALITY

For summarizing the conditions of mortality in various parts of the world, three measures will be used

(*a*) The crude death rate, i e , the annual number of deaths per 1 000 inhabitants,

(*b*) The infant mortality rate, i e , the number of deaths under one year of age per 1,000 live births,

(*c*) The expectation of life at birth i e , the average number of years to be lived by a new born child

Each of these indices has its advantages and draw backs The first one—the crude death rate—does not give a perfect measure of the level of mortality because it is influenced by the age composition of the population (thus, a higher proportion of aged persons implies a higher crude death rate, other things being equal) But in countries with poor statistics, it is often the only index that it is possible to obtain

The infant mortality rate—by definition of limited coverage—is not only an index of mortality as such, it is also an important indicator of the level of living For example, the care given to infants is related to the level of education as well as to health conditions

The expectation of life at birth is the best synthetic index of mortality, it reflects mortality experience at all age levels and is free of influence from the age composition of the population Unfortunately many countries do not have the data required for its calculation

*Crude death rates*

Mortality is closely related to age Except fo first period of life (from birth to the age of ten years) the mortality rates of the successive age g rise constantly, the increase accelerating more and as age advances As a result, the age distribution population greatly influences the crude death rate, is a mean value of the age specific mortality rates v ted by the number of people in each age group crude rate is a satisfactory index of mortality o comparisons of populations with similar age dis tions—the population of the same country over a period of time, or of two or more countries which followed approximately the same demographic tion in the past

It is useful to have an idea of the order of magr of the error involved in comparing levels of mortali means of the crude death rate where there are differ in age distribution of the populations involved i comparison

The age structure of a population is the result o past evolution of that population If, in a given po tion, fertility and mortality remain constant, the po tion will tend toward a certain age distribution d mined by the levels of mortality and fertility Th called a stable age distribution " and it can be c lated for any given levels of fertility and mortality for example, the stabilized crude birth rate is 15 thousand and the stabilized mortality level, as meas

On the other hand, the death registration statistics (if it can be assumed that there has been no deterioration of the completeness of registration) give conflicting evidence, suggesting a level of mortality which could have been attained only by a very sharp decline, much sharper than has been observed in other parts of the world in recent times

*Table 16*

NUAL CRUDE DEATH RATES (PER 1,000 POPULATION) ACCORDING TO OFFICIAL REGISTRATION AND UNOFFICIAL ESTIMATES FOR SOME COUNTRIES IN ASIA 1950-55 •

| *untry* | *Registered rate* | *Estimated rate* | |
|---|---|---|---|
| | | *Projection based on registration* • | *Projection based on assumed uniform mortality decline* • |
| urma | 35 7 • | — | About 31 |
| ylon | 11 6 | About 14 | About 14 |
| ina Taiwan | 9 8 | About 12 | About 19 |
| dia | 14 7 • | About 21 | About 23 |
| kistan | 12 1 • | | About 30 |
| ilippines | 11 3 • | About 28 | About 31 |
| urkey | | | About 10 |
| hailand | 9 9 • | About 19 | About 28 |

*Sources of registered rates* United Nations *Demographic Yearbook* and *Monthly Bulletin of Statistics* and data supplied by Governments in few cases

• The main countries in Asia not listed here or in table 15 are Indonesia, Indochina, Iran Korea and Mainland China. For Iran, a sample survey gave recently an infant mortality rate of 20 per 1,000 live births which corresponds approximately to a crude death-rate of 30 per 1,000 For Mainland China a sample survey gave a crude death rate of 17 per 1 000 in 1953

• The registered rates have been increased to correct for under registration The adjustment is based on the difference between registered and estimated rates in an intercensal period

• The intercensal estimates have been projected forward to 1950-55 assuming a uniform decrease in mortality equivalent to an annual increase in the expectation of life at birth of ½ year

• 1951 53 Certain towns only, having an aggregate population of 1 3 million out of a national total of 19 million

• 1950-52

• 1950-51

• 1950-54 According to data included in the " National Statement of the Philippines " presented at the United Nations Seminar on Population in Asia and the Far East, Bandung, November-December 1955

• 1950-53

To sum up, some countries of Asia have achieved drastic reductions in mortality which, together with the favourable age distribution of their population, have brought their crude death-rates to a very low level—in some cases below 10 per 1,000 Other countries in the region are still subject to heavy, although probably diminishing, mortality While the death rates of the latter countries cannot be precisely determined, in many cases they are apparently in the range of 25 to 30 Almost every country in Asia can be classified in one or the other of these two groups, for it is likely that those countries for which no adequate statistics are available (Middle Eastern countries, Indonesia, etc) belong to the second group

*Crude death-rates in Middle and South America*

Crude death-rates for 1947-49, 1950-52 and 1953-55 are shown in table 17 for the countries in Latin America and the Caribbean Region which have fairly accurate statistics [14]

*Table 17*

ANNUAL REGISTERED CRUDE DEATH RATES (PER 1,000 POPULATION) FOR COUNTRIES OF MIDDLE AND SOUTH AMERICA WITH FAIRLY ACCURATE STATISTICS ON DEATHS

| *Country* | *1947-49* | *1950-52* | *1953-55* |
|---|---|---|---|
| Argentina | 9 4 | 8 8 | 8 6 |
| Chile | 17 4 | 14 3 | 12 7 |
| Costa Rica | 13 6 | 11 8 | 11 0 |
| Guatemala | 23 3 | 21 9 | 20 7 |
| Jamaica | 13 2 | 11 8 | 10 4 |
| Mexico | 16 9 | 16 2 | 14 0 |
| Puerto Rico | 11 6 | 9 7 | 7 6 |
| Trinidad and Tobago | 12 6 | 12 1 | 10 3 |

*Sources* United Nations *Demographic Yearbook* and *Monthly Bulletin of Statistics*

The declining trend in mortality which was apparent in the period covered by the *Preliminary Report* has steadily continued The levels attained by the crude death rates in the period 1953-55 are in some cases quite low It is necessary here again to emphasize that the age composition of the population in the countries of this region tends to minimize the crude death-rate in comparison with rates for countries with an older population—European countries, for example

For many Latin American countries deficiencies of death registration are suggested by the comparison of registered crude death-rates with estimated rates for 1950-55 (table 18)

If the difference between the registered and estimated death-rates is taken as a rough estimate of under registration, it appears that in many countries under registration of deaths exceeds 50 per cent The recent estimated death rates for countries with incomplete statistics are well above the rates for countries with fairly accurate statistics In the former group, the estimated rates vary from 15 to 25 per 1,000, while the latter countries, except Guatemala, show estimated rates between 10 and 15 per 1,000

For countries with deficient statistics there is no way to measure precisely the magnitude of the fall in mortality in recent years But the uncertainties of the data cannot

[14] The method used to judge the accuracy of statistics (comparison between registered crude rates and estimates based on the stable population analysis) is explained in footnote 7

*Table 18*

ANNUAL CRUDE DEATH RATE (PER 1 000 POPULATION) ACCORDING TO REGISTRATION AND ESTIMATES FOR SOME COUNTRIES OF MIDDLE AND SOUTH AMERICA 1950-55 [a]

| *Country* | *Registered rate* | *Estimated rate* |
|---|---|---|
| (Countries with fairly accurate statistics on deaths) [b] | | |
| Argentina | 8 7 | About 10 |
| Chile | 13 5 | About 15 |
| Costa Rica | 11 4 | About 15 |
| Guatemala | 21 3 | About 25 |
| Jamaica [c] | 11 1 | About 15 |
| Mexico | 15 1 | About 15 |
| (Countries with apparently incomplete statistics on deaths) [b] | | |
| Bolivia | 15 6 [d] | About 20 |
| Brazil | — | About 20 |
| Colombia | 13 3 | About 20 |
| Cuba | 7 0 | About 15 |
| Dominican Republic | 9 6 | About 20 |
| Ecuador | 16 4 | About 20 |
| El Salvador | 15 0 | About 25 |
| Honduras | 11 7 | About 20 |
| Nicaragua | 9 8 | About 20 |
| Panama | 9 1 | About 20 |
| Paraguay | 7 3 | About 15 |
| Peru | 11 3 | About 20 |
| Venezuela | 10 5 | About 20 |

*Sources of registered rates* United Nations *Demographic Yearbook* and *Monthly Bulletin of Statistics* and data supplied by Governments

[a] Haiti Puerto Rico Trinidad and Tobago and Uruguay are the main countries in Middle and South America not listed here Heavy emigration hinders the calculation of any estimates for Puerto Rico for which the registered crude death rate is indicated in table 17 For Uruguay no estimates have been made because of lack of census data the average annual registered crude death rate for 1950-53 and 1955 was 7 7 For Haiti no information is available the level of mortality appears very high

[b] The method of testing the accuracy of statistics is explained in footnote 7

[c] For Jamaica relatively heavy emigration may partly explain the difference between estimated and registered death rates

[d] 1950-53

[e] 1950-52

[f] 1946-49

hide the fact that their mortality has been decreasing and continues to decrease This fact is made evident in table 19

[illegible]

universal But, as in the case of the African and Asian countries, the comparison of the deficient registration figures for successive periods does not give a reliable measure of the magnitude of the declines which have occurred

*Table 19*

ANNUAL REGISTERED CRUDE DEATH RATES (PER 1 000 POPULATION) FOR COUNTRIES OF MIDDLE AND SOUTH AMERICA HAVING APPARENTLY DEFICIENT REGISTRATION OF DEATHS [a]

| *Country* | *1947-49* | *1950-55* |
|---|---|---|
| Bolivia | 16 0 | 15 6 [b] |
| Colombia | 14 3 | 13.3 |
| Cuba | 7 3 | 7 0 [c] |
| Dominican Republic | 10 7 | 9 6 |
| Ecuador | 15 1 | 16 4 |
| El Salvador | 16 5 | 15 0 |
| Honduras | 13 7 | 11 7 |
| Nicaragua | 13.2 | 9 8 |
| Panama | 10 6 | 9 1 |
| Peru | 11 9 | 11.3 |
| Venezuela | 12.7 | 10.5 |

*Sources* United Nations, *Demographic Yearbook* and *Monthly Bulletin of Statistics*

[a] There is evidence of large under registration of deaths in the countries shown in this table and the crude death-rates listed therefore understate the level of mortality They are given only to show the trend between the two periods considered For estimates of the true levels of mortality in these countries, see table 18

[b] 1950-53

[c] 1950-52.

## *Crude death rates in Europe, in Canada, United States, Australia, New Zealand and European population of the Union of South Africa*

The crude death-rates of these countries for the periods 1947-49, 1950-52 and 1953-55 are given in table 20 The European countries have been grouped in the same way as in the analysis of fertility

The crude death rates observed during 1950-52 and 1953 55 were a little lower than those which prevailed in 1947-49 No great differences appear between the rates for the sub-groups of European countries shown in the table, though somewhat lower rates are found in the countries of European settlement overseas The nearly uniform crude rates, however, hide a diversity of actual mortality conditions It so happens that differences in age composition of the population in various countries affect the crude death rates in such a way as largely to counter balance the real variations of mortality A superior measure of mortality, the expectation of life at birth, is available for many of these countries (see below), but not for all of them It can, however, be estimated from the crude death rates in combination with observed birth rates

In countries of group I, where the crude death rates average 11 per 1,000, the birth rates range from 15 to 2[illegible] per thousand The expectation of life corresponding to such a combination of death and birth-rates is approximately seventy years, and in fact the expectations of life shown below for countries in this group are generally close to this figure

In the countries of group II, where the average crude death rate is about 10 per thousand, the present birth

ates are between 25 and 30 per thousand The combina-
ion of those rates corresponds to an expectation of life
n the neighbourhood of sixty five years

*Table 20*

NNUAL REGISTERED CRUDE DEATH RATES (PER 1 000 POPULATION) FOR COUNTRIES OF EUROPE, CANADA UNITED STATES AUSTRALIA NEW ZEALAND AND EUROPEAN POPULATION OF THE UNION OF SOUTH AFRICA

| ountry | 1947-49 | 1950 52 | 1953 55 |
|---|---|---|---|
| *Europe (Group I)* | | | |
| Austria | 12 7 | 12 4 | 12 1 |
| Belgium | 12 9 | 12 3 | 12 1 |
| France | 13 2 | 12 9 | 12 5 |
| Germany | | | |
| Eastern Germany ᵃ | 16 3 | 11 8 ᵇ | 11 9 ᵇ |
| Western Germany | 10 7 | 10 4 | 10 7 |
| Iorway | 9 1 | 8 7 | 8 5 |
| weden | 10 2 | 9 8 | 9 6 |
| witzerland | 11 0 | 10 2 | 10 1 |
| Inited Kingdom | 11 7 | 11 9 | 11 5 |
| Czechoslovakia | 11 8 | 11 2 | 10 2 |
| Denmark | 9 1 | 9 0 | 8 9 |
| Finland | 11 4 | 9 9 | 9 3 |
| Hungary | 11 9 | 11 5 | 10 9 |
| reland | 13 3 | 13 0 | 12 1 |
| Netherlands | 7 9 | 7 4 | 7 6 |
| *roup II)* | | | |
| Bulgaria | 13 4 ᶜ | 11 1 ᵈ | 9 1 |
| Poland | 11 4 | 11 7 | 10 0 |
| Romania ᵉ | | | 11 5 ᶠ |
| USSR ᵉ | | 9 5 | 8 8 |
| Yugoslavia | 13 3 | 13 0 | 11 6 |
| *roup III)* | | | |
| Greece ᵉ | | 7 2 | 7 0 |
| Portugal | 13 5 | 12 1 | 11 2 |
| Spain | 11 6 | 10 7 | 9 4 |
| Italy | 10 9 | 10 1 | 9 5 |
| *her Regions* | | | |
| Union of South Africa (European population) | 8 8 | 8 6 | 8 6 |
| Canada ᵍ | 9 3 | 8 9 | 8 3 |
| United States | 9 9 | 9 6 | 9 4 |
| Australia ʰ | 9 7 | 9 6 | 9 0 |
| New Zealand (European population) | 9 2 | 9 4 | 8 9 |

*Sources* United Nations *Demographic Yearbook* and *Monthly ulletin of Statistics*, and data supplied by Governments For SSR the data are taken from *Narodnoe Khozyaistvo SSSR atisticheskii Sbornik*, p 243

ᵃ Rates are understated—registration of deaths is officially ported as incomplete

ᵇ Including East Berlin

ᶜ 1947

ᵈ 1951 52

ᵉ No information obtained from country on completeness of registration

ᶠ 1953

ᵍ Excluding Yukon and Northwest Territories

ʰ Excluding full blooded aborigines

For Southern European countries, group III, where the average death-rate is about 9 per thousand, the present birth rates average 20 per thousand But in this area the birth rates have been falling continuously over a period of time, and the age composition of the population consequently corresponds to a somewhat higher level of fertility Taking the average death rate of 10 in combination with a birth rate of 25, the resulting expectation of life is about 65 years, as in group II

The countries of European settlement overseas listed in table 20 have an average death rate of about 9 per thousand Their present birth rates average about 25, but this level has been attained as a result of an increase during recent years The expectation of life is therefore estimated from the combination of the death rate of 9 with a birth rate of 20 to 25 The resulting estimate of about 70 years again agrees with the figures for countries in this category shown below

### *Infant mortality*

Although official infant mortality rates—number of deaths under one year of age per thousand live births—are published for most countries of the world, these *figures are quite unreliable except for Europe, the English*-speaking countries outside Europe and a few other countries In countries with reliable statistics, the same trend appears everywhere infant mortality rates have been declining for more or less long periods in the past and the fall is still going on This fact is made evident by the data in table 21, where mean values for the periods 1947-49, 1950 52 and 1953 55 are shown for countries with relatively good statistics of infant mortality [15]

Reliable data are available for only four countries in Middle America, two in South America, six in Asia and none in Africa (European population of the Union of South Africa excepted) The data can be supplemented by rough estimates for some countries of America and Asia where vital statistics are unreliable or do not exist at all These estimates are based on the fact that a low infant mortality rate is always associated with a low level of general mortality and a high infant mortality rate with a high level of general mortality Thus, combining the estimates of fertility and mortality, an evaluation of the general level of mortality can be obtained and thence an approximate estimate of infant mortality Table 22 gives such estimates

From table 21, it seems that in some cases the infant mortality rate is levelling off approaching a level around 20 per thousand (as is the case of Sweden and the European population of New Zealand, for example), below which it may be difficult to go under present conditions The consideration of causes of death can throw some

[15] *In some cases the statistics can be considered as reliable for measuring mortality as a whole but unreliable for measuring infant mortality Therefore, some countries shown in previous tables as having relatively good statistics do not appear in table 21 These countries are listed in table 22 where estimates are given*

In countries with low infant mortality rates, few deaths from exogenous causes now occur and these countries are now beginning an intensified struggle against causes belonging to the second and third sub-categories mentioned above Here success so far has been much less spectacular than that which has been achieved in fighting exogenous causes, and it is for this reason that the rates appear to be levelling off on a " plateau " From a medical point of view, there may be no absolute limit (above zero) below which the infant mortality rate could not possibly be reduced But it is clear that in those countries where the rate is now lowest, it has become increasingly difficult to reduce it further, and progress in that direction has become much slower than before Another " plateau " can be foreseen for the future, represented by mortality from the first sub-category of endogenous causes One may say that the first " plateau " in the downward trend appears when the infant mortality rate reaches a level of about 20 per thousand, and that the second " plateau " would be reached at a level of about 10 per thousand

The statistics in table 21 and estimates in table 22 make it clear that most countries of the world still have far to go in the control of exogenous causes of infant mortality before they will face the problems of even the first of these " plateaus " in the trend

### *The expectation of life at birth*

The expectation of life at birth is the average number of years of life for a group of persons born at the same time and subjected to mortality at successive ages corresponding to the present experience of the population in the area considered

Two recent available values of expectation of life at birth for certain countries are given in table 23 For each of those countries an estimated value is also included, corresponding to the period 1950-55, in order to present a recent evaluation These estimates have been worked out from the registered infant mortality rates on the assumption that an association exists between that rate and the expectation of life at birth Model life tables have been used [16]

Comparison of the values shows once more that mortality has continued to decline in the countries listed In some few cases, where the estimated expectation of life is slightly below the latest available official value derived from a recent life table (for example, Costa Rica), the difference is probably due to under-registration of deaths, although the defect of registration is probably not too important

For countries with apparently incomplete or inadequate vital statistics, estimates of the expectation of life at birth have been computed that are consistent with the estimated crude birth-rates, crude death-rates and infant mortality rates presented above These rates, for the period 1950-55, are presented in table 24

[16] *Age and Sex Patterns of Mortality*, Population Studies No 22 (United Nations publication, Sales No 1955 XIII 9)

*Table 24*

ESTIMATED EXPECTATION OF LIFE AT BIRTH (BOTH SEXES) FOR CERTA COUNTRIES WITHOUT LIFE TABLES OR WITH APPARENTLY INCOMPL OR INADEQUATE VITAL STATISTICS, 1950-55

| *Country* | *Expectation of life at birth (years)* |
|---|---|
| *Asia* | |
| Turkey | Around 60 |
| China Taiwan | Around 55 |
| Thailand | Around 40 |
| Burma India, Pakistan, Philippines | Around 35 |
| *Middle and South America* | |
| Cuba, Mexico, Paraguay | Around 5 |
| Bolivia, Brazil, Colombia, Dominican Republic, Ecuador Honduras, Nicaragua, Panama, Peru, Venezuela | Around 4 |
| El Salvador, Guatemala | Around 4 |

It has been noted that, in the case of infant mortal progress during recent years in some cases has been sl and that a level has been reached which it appears d cult to pass The same reasoning applies to death-r for other ages If we consider a country with low m tality and assume that all deaths due to infectious eases and even accidents are eliminated, the remain deaths, due primarily to " degenerative " diseases ( chapter III), can be taken as representing a morta level that is difficult to reduce in the present state medical knowledge The results obtained from such analysis are reproduced in table 25 for both sexes for selected age-groups and are presented toget with (1) actual mortality rates for these age-gro which can be reasonably assumed to have prevailed European countries in the early part of the ninetee century (corresponding to an expectation of life at b of 35 years, which is approximately the current leve mortality in some Asiatic and African countri (2) average rates for the same age-groups for the pre- years 1936-39 in four countries with very low mortal namely the Netherlands, New Zealand, Norway Sweden, (3) average rates for the same four count in the years 1951-53 (1951-54 for New Zealand)

The table serves to show the drastic reduction death-rates since the early 19th century, the importa of the changes which have occurred since the pre years, and the possibilities of future developments un present medical knowledge It can be seen that absolute differences between the current rates and assumed possible rates are small for the younger a (except infants) even though differences are large relative terms It does not seem probable, therefo that the rates for the younger ages prevailing in the fo countries considered can be greatly reduced in the ne future Current death-rates at more advanced a and infant mortality rates are still at some distance fro the " plateau " values

*Table 25*

UAL DEATH RATES PER THOUSAND POPULATION OF SPECIFIED
3E-GROUPS FOR DIFFERENT LEVELS OF MORTALITY (BOTH SEXES)

| (years) | Estimated rates prevailing in Europe during first decades of the 19th century | Average rates for countries with low mortality (Netherlands Norway New Zealand Sweden) [b] | | Assumed rates of mortality obtainable with elimination of all deaths from infectious diseases and accidents [c] |
|---|---|---|---|---|
| | | 1936-39 | 1951 54 | |
| ler 1 | 254 99 | 38 87 | 22.50 | 11 00 |
| ǀ | 35 32 | 2 97 | 1 35 | 0 03 |
| ;4 | 5 95 | 1 00 | 0 45 | 0 08 |
| !4 | 11 53 | 2 45 | 1 02 | 0 22 |
| ı4 | 14 06 | 2 80 | 1 35 | 0 59 |
| ı4 | 18 25 | 4 30 | 2 53 | 1 58 |
| ;4 | 27 63 | 8 58 | 6 40 | 4 26 |
| 54 | 48 41 | 19 65 | 16 07 | 11 50 |
| 74 | 98 97 | 51 80 | 44 17 | 31 01 |
| 34 | 209 25 | 140 87 | 124 00 | 83 66 |
| ectation of fe at birth n years) | 35 | 66 | 72 | 77 |

According to a model table *Age and Sex Patterns of rtality*, op cit

United Nations, *Demographic Yearbook*

Rates quoted from J Bourgeois Pichat, " Essai sur la mortalité logique de l'homme ", *Population* 1952 No 3, juillet-septembre, 381 394

POPULATION GROWTH AND AGE STRUCTURE

The registered or estimated crude birth- and death- tes for various countries during 1950 55 [illegible] a world-wide [illegible] ... also shown, as ... census for each country

Most of the countries listed in the table can be classi- d into three groups

A *Countries with high fertility and mortality* Proba- y much of Africa (except the population of European igin), much of Asia and some countries in Middle and outh America For these countries, the birth-rates nge from 40 to 50 and the death-rates are in the ighbourhood of 25 or 30 per 1,000, corresponding to expectation of life of about 30 or 35 years Popula- on growth is moderate (1 to 2 per cent per annum) d the population is young, having a large proportion f children and a low ratio of aged persons

B *Countries with high fertility and moderate or low ortality* The major part of Middle and South America, ome countries in Asia and possibly some in Africa Iere the birth-rates are of the same order as in Group , but the death-rates have fallen to the range of 10 to 0 per 1,000 or lower, corresponding to an expectation f life of 40 to 60 years The result is rapid popula- ion increase, ranging from 2 to 3 per cent per annum or higher. These countries also have many children and few aged persons in their population

C *Countries with low fertility and mortality* Europe, the United States, Australia and New Zealand, Euro- pean population of South Africa, Japan, Argentina These countries have birth-rates in the range of about 15 to 25 and death-rates in the neighbourhood of 10 per 1,000 Their population is growing at slow or moderate rates (½ to 1 ½ per cent per annum) As a rule, these countries have an aging population with a rela- tively small proportion of children and large propor- tions of persons over sixty years of age

The following countries, among those for which data are available, do not fall into any of the categories in this classification Canada, Chile, Cuba, Cyprus, Israel, Jamaica, Puerto Rico, Poland, Ryukyu Islands, Trinidad and Tobago and Yugoslavia Their birth rates range from 28 to 35 per 1,000, not so high as the range indicated for categories A and B, but considerably above the range for category C A birth-rate in this range implies a cer- tain limitation of the size of families, but except in Puerto Rico, the size of families seems to be stabilized in the countries mentioned

As the decline of death-rates in the under-developed countries continues, more and more of them shift from category A (high fertility, high mortality) to category B (high fertility, low mortality) where population growth is rapid Meanwhile, among the countries of both categories A and B, the average annual excess of births over deaths grows steadily larger Rates of natural increase approximating or exceeding 3 per cent per annum, which were almost unknown in the world up to the time of the Second World War, are no longer exceptional

Only in a few cases do the available data provide a reliable measure of the trend in the rate of natural increase for the countries in categories A and B Table 27 shows the recorded rates of natural increase during the periods 1947-49 and 1953 55 for those for which the data appear to be adequate

The world picture emerging from the analysis of cur- rent demographic trends is one of rapid and ever- accelerating population growth, and under present con- ditions it can be expected that world population will continue to grow—and accelerate in its rate of growth— for some time in the future, primarily as a result of extremely rapid expansion in the economically under- developed regions

SOME SOCIAL AND ECONOMIC IMPLICATIONS OF POPULATION GROWTH IN UNDER-DEVELOPED COUNTRIES

The falling death-rates in under-developed countries are a tribute to the effectiveness of modern methods of disease control and programmes of medical care and health education The people of these countries are living longer, but this does not mean that in other respects levels of living have risen to the same extent The acceleration of population growth which results from this reduction of mortality requires that the production

In countries with low infant mortality rates, few deaths from exogenous causes now occur and these countries are now beginning an intensified struggle against causes belonging to the second and third sub-categories mentioned above Here success so far has been much less [illegible]

cal point of view, there may be no abso[illegible] zero) below which the infant mortality rate could not possibly be reduced But it is clear that in those countries where the rate is now lowest, it has become increasingly difficult to reduce it further, and progress in that direction has become much slower than before Another "plateau" can be foreseen for the future, represented by mortality from the first sub-category of endogenous causes One may say that the first "plateau" in the downward trend appears when the infant mortality rate reaches a level of about 20 per thousand, and that the second "plateau" would be reached at a level of about 10 per thousand

The statistics in table 21 and estimates in table 22 make it clear that most countries of the world still have far to go in the control of exogenous causes of infant mortality before they will face the problems of even the first of these "plateaus" in the trend

*The expectation of life at birth*

The expectation of life at birth is the average number of years of life for a group of persons born at the same time and subjected to mortality at successive ages corresponding to the present experience of the population in the area considered

Two recent available values of expectation of life at birth for certain countries are given in table 23 For each of those countries an estimated value is also included, corresponding to the period 1950 55, in order to present a recent evaluation These estimates have been worked out from the registered infant mortality rates on the assumption that an association exists between that rate and the expectation of life at birth Model life tables have been used [16]

Comparison of the values shows once more that mortality has continued to decline in the countries listed In some few cases where the estimated expectation of life is slightly below the latest available official value derived from a recent life table (for example, Costa Rica), the difference is probably due to under registration of deaths, although the defect of registration is probably not too important

For countries with apparently incomplete or inadequate vital statistics, estimates of the expectation of life at birth have been computed that are consistent with the estimated crude birth rates, crude death rates and infant mortality rates presented above These rates, for the period 1950 55, are presented in table 24

[16] *Age and Sex Patterns of Mortality*, Population Studies No 22 (United Nations publication, Sales No 1955 XIII 9)

*Table 24*

ESTIMATED EXPECTATION OF LIFE AT BIRTH (BOTH SEXES) FOR CE[illegible] COUNTRIES WITHOUT LIFE TABLES OR WITH APPARENTLY INCOMPLETE OR INADEQUATE VITAL STATISTICS, 1950-55

| *Country* | *Expectation of life at birth (years)* |
|---|---|
| *Asia* | |
| Turkey | Around 60 |
| China Taiwan | Around 55 |
| Thailand | Around 40 |
| Burma India, Pakistan, Philippines | Around 35 |
| *Middle and South America* | |
| Cuba Mexico, Paraguay | Around 50 |
| Bolivia, Brazil, Colombia, Dominican Republic, Ecuador, Honduras, Nicaragua, Panama, Peru, Venezuela | Around 45 |
| El Salvador, Guatemala | Around 40 |

It has been noted that, in the case of infant mortali[ty] progress during recent years in some cases has been sl[ow] and that a level has been reached which it appears di[ffi]cult to pass The same reasoning applies to death-ra[tes] for other ages If we consider a country with low m[or]tality and assume that all deaths due to infectious d[is]eases and even accidents are eliminated, the remain[ing] deaths, due primarily to "degenerative" diseases ( chapter III), can be taken as representing a mortal[ity] level that is difficult to reduce in the present state [of] medical knowledge The results obtained from such [an] analysis are reproduced in table 25 for both sexes a[nd] for selected age-groups and are presented toget[her] with (1) actual mortality rates for these age grou[ps] which can be reasonably assumed to have prevailed [in] European countries in the early part of the ninetee[nth] century (corresponding to an expectation of life at bi[rth] of 35 years, which is approximately the current level [of] mortality in some Asiatic and African countrie[s] (2) average rates for the same age-groups for the pre-w[ar] years 1936 39 in four countries with very low mortali[ty] namely the Netherlands, New Zealand, Norway a[nd] Sweden, (3) average rates for the same four countr[ies] in the years 1951-53 (1951-54 for New Zealand)

The table serves to show the drastic reduction [in] death rates since the early 19th century, the importan[ce] of the changes which have occurred since the pre-w[ar] years, and the possibilities of future developments und[er] present medical knowledge It can be seen that t[he] absolute differences between the current rates and t[he] assumed possible rates are small for the younger a[ges] (except infants) even though differences are large [in] relative terms It does not seem probable, therefor[e] that the rates for the younger ages prevailing in the fo[ur] countries considered can be greatly reduced in the ne[ar] future Current death rates at more advanced a[ges] and infant mortality rates are still at some distance fro[m] the "plateau" values

*Table 26 (continued)*

| Country | Vital rates 1950-55 (per 1 000 population) | | | Age composition of the population (per cent) | | | |
|---|---|---|---|---|---|---|---|
| | B rth rate | Death rate | Natural increase | Census year | Under 15 years | 15-59 years | 60 years and over |
| *pe (Group I)* (continued) | | | | | | | |
| orway | 18 7 | 8 6 | 10 1 | 1950 | 24 4 | 61 8 | 13 8 |
| veden | 15 4 | 9 7 | 5 7 | 1950 | 23 4 | 61 6 | 14 9 |
| vitzerland | 17 3 | 10 2 | 7 1 | 1950 | 23 6 | 62.4 | 14 0 |
| nited Kingdom | 15 8 | 11 7 | 4 1 | 1951 | 22 6 | 61 7 | 15 7 |
| zechoslovakia | 22 1 | 10 7 | 11 4 | 1947 | 24 3 | 64.2 | 11 5 |
| enmark | 17 8 | 9 0 | 8 8 | 1950 | 26 3 | 60 3 | 13 4 |
| nland | 22 5 | 9 6 | 12 9 | 1950 | 30 0 | 59 9 | 10 1 |
| ungary | 21 2 | 11 2 | 10 0 | 1949 | 24 9 | 63 5 | 11 6 |
| eland | 21 4 | 12 6 | 8 8 | 1951 | 28 9 | 56 3 | 14 8 |
| etherlands | 22 1 | 7 5 | 14 6 | 1947 | 29 3 | 60 0 | 10 7 |
| *up II)* | | | | | | | |
| ulgaria | 20 6 | 9 9 | 10 7 | 1946 | 27 9 | 62 6 | 9 6 |
| oland | 30 0 | 10 9 | 19 1 | 1955 [d] | 29 6 [e] | 61 8 [f] | 8 6 |
| omania | 23 7 [h] | 11 5 [h] | 12 2 | 1948 | 28 9 | 62 9 | 8 2 |
| SSR | 26 2 | 9 2 | 17 0 | | | | |
| ugoslavia | 28 5 | 12 3 | 16 2 | 1953 | 30 6 | 60 6 | 8 9 |
| *up III)* | | | | | | | |
| reece [a] | 19 5 | 7 1 | 12 4 | 1951 | 28 8 | 61 0 | 10 1 |
| ortugal | 23 9 | 11 7 | 12 2 | 1950 | 29 5 | 60 1 | 10 5 |
| pain | 20 4 | 10 1 | 10 3 | 1950 | 26 2 | 63 1 | 10 7 |
| aly | 18 3 | 9 8 | 8 5 | 1951 | 26 3 | 61 5 | 12 2 |
| *er Regions* | | | | | | | |
| nion of South Africa (European population) | 25 3 | 8 6 | 16 7 | 1951 | 31 7 | 38 6 | 9 7 |
| anada | 27 9 | 8 6 | 19 3 | 1950 | 30 3 | 61 9 | 7 8 |
| nited States | 24 9 | 9 5 | 15 4 | 1950 | 26 9 | 61 0 | 12 2 |
| ustralia | 23 0 | 9 3 | 13 7 | 1947 | 25 2 | 62 5 | 12 3 |
| ew Zealand | 24 6 | 9 2 | 15 4 | 1951 | 29 4 | 57 3 | 13 2 |

0-15 years

Distribution calculated on approximately two-thirds of the ulation enumerated

Registration of deaths is officially reported as incomplete

Estimate from 1956 Statistical Yearbook of Poland

[e] 0-13 years

[f] 14-59 years

[g] 1953 only

[h] Registration of births and deaths is officially reported as incomplete

*Table 27*

UAL REGISTERED CRUDE BIRTH RATES, DEATH RATES, AND RATE OF NATURAL INCREASE (PER 1,000 POPULATION) 1947-49 AND 1953-55, FOR CERTAIN COUNTRIES OF ASIA AND MIDDLE AND SOUTH AMERICA WITH RELATIVELY GOOD STATISTICS

| ntry | Birth-rate | | Death-rate | | Natural increase [a] | |
|---|---|---|---|---|---|---|
| | 1947-49 | 1953-55 [f] | 1947-49 | 1953-55 | 1947-49 | 1953-55 |
| ylon | 40 0 | 37 8 | 13 4 | 10 8 | 26 | 27 |
| ina Taiwan | 41 0 [a] | 45 0 | 13 7 [a] | 8 7 | 27 [a] | 36 |
| lava (Federation of) | 42 4 | 43 5 | 16 6 | 12,0 | 28 | 32 |
| gapore | 46 4 | 48 7 | 12 5 | 9 8 | 32 | 39 |
| atemala | 51 9 | 50 5 | 23 3 | 20 7 | 29 | 30 |
| xico | 44 9 | 45 9 | 16 9 | 14 0 | 28 | 32 |

[a] The rate of natural increase is affected by errors in registration both births and deaths and is therefore less reliable than either birth- or the death-rate Rates are shown in units in orde to avoid giving an undue impression of

of goods and services be expanded at a still more rapid rate if these countries are to progress toward a satisfactory level of living

Rapid growth of population may complicate the problem of the economic and social development of under developed countries, in three principal ways[17] First, it can increase the pressure of population on land that is already densely settled and so retard increases in the productivity of agricultural labour This effect is seen not only in countries where nearly all the cultivable land is now occupied but also in many under-developed countries where the density of agricultural population in the cultivated areas is high, although large amounts of potentially productive land lie unused because of land ownership systems, lack of capital or techniques to exploit available land, or for other reasons[18]

Second, accelerating population growth can aggravate the problem of capital shortage, which is one of the most important obstacles to economic development of nearly all under developed countries The faster the population grows, the larger the share of each year's income which must be invested in increasing the stock of productive equipmen [illegible] level of equipment per [illegible] ments required for this [illegible] annual income that will be available either to raise the level of current consumption *per capita*, or to make investments which would increase productivity and permit higher levels of consumption in the future

While in a well developed dynamic economy the demand for such capital investments may serve as a stimulus to continuing economic growth, the case of the under developed countries, with their narrow margin of income over subsistence needs, is different For most of them it is difficult to save and invest enough from their meagre annual income to permit economic development to proceed at a satisfactory pace, even without rapid population growth It is true that if these countries can industrialize and better utilize their human as well as their natural resources, some of them, at least, will undoubtedly benefit in the long run from a substantially larger population But even where a larger population would be advantageous in the long run, economic progress will be hindered if numbers increase so rapidly as to put an excessive strain upon the economy

Third, the high birth-rates of the under-develo[illegible] countries create a heavy load of dependent children [illegible] the working population As table 26 shows, the perc[illegible] ages of children under 15 years of age in the less de[illegible] oped countries of Asia, Africa, and Latin America [illegible] generally in the order of 40 per cent or more of the t[illegible] population, while the range of this ratio in the Europe[illegible] countries is from about 20 to 30 per cent This d[illegible] ence is the consequence of the higher birth rates in t[illegible] former areas The necessity of supporting so [illegible] children puts the workers of the under-developed co[illegible] tries at an added disadvantage in their effort to save a[illegible] invest for economic development It also complica[illegible] the problem of providing the children with the edu[illegible] tion that is essential for social and economic advanceme[illegible] in the long run

The economic handicap of a high ratio of childr[illegible] to a certain extent offset in under-developed cou[illegible] by the custom of putting children to work at an ea[illegible] age, and also by the practice in these countries of co[illegible] tinuing to work beyond the age at which retirement [illegible] common in the industrialized countries While nei[illegible] of these practices may be socially desirable,[20] they red[illegible] the dependency load The extent of the differe[illegible] between under developed and industrialized coun[illegible] in employment of the young and the aged is indicated [illegible] the figures in table 28, which are based on an analysis [illegible] available census statistics on economic activities of t[illegible] male population at various ages The comparison [illegible] limited to males because differences in the definition [illegible] economic activity as applied to females in the censu[illegible] of different countries hinder international compariso[illegible] of the figures for females

A crude measure of dependency can be devised wh[illegible] takes account of both the age composition of the popu[illegible] tion and the extent of economic activity in the diffe[illegible] age groups It is obtained by comparing the total n[illegible] ber of males who are not economically active with [illegible] number who are active, as enumerated in the cen[illegible] Table 29 shows this comparison for six countries wh[illegible] have been selected to represent different demograp[illegible] and economic conditions In addition to the total n[illegible] ber of inactive males, the table shows the numbers [illegible] inactive males in different age groups, the number [illegible] each of these age groups being expressed also as a r[illegible] to the total number of economically active males

The figures for the Moslem population of Algeria [illegible] for Brazil and Taiwan exemplify the situation of und[illegible] developed countries with high birth rates (see the [illegible] mary of demographic characteristics of each of the countries shown in table 30 ) Because of the large [illegible] bers of dependent children in their populations, th[illegible] countries have a high ratio of inactive to economic[illegible] active males in spite of high percentages of young p[illegible] ple and of the aged engaged in economic activit[illegible]

[17] For fuller discussion see United Nations *The Determinants and Consequences of Pop* [illegible] (United Nations p[illegible] and the summary [illegible] *In Under Develope*[illegible] [illegible] *No* [illegible] (United Nations publication Sales No 1954 XIII 7)

[18] See *Preliminary Report on the World Social Situation*, p 6

[19] "In a country in which the ratio between the value of the existing fixed capital and the annual national income is of the [illegible] [illegible] *Processes and Problems of Industrialization in Under Developed Countries* [United Nations publication, Sales No 1955 II B 1], p 15)

[20] The value of compulsory elementary education in plac[illegible] child labour is of course universally recognized but the [illegible] of compulsory retirement of elderly people who are willi[illegible] able to work has been increasingly questioned

[21] The percentages of economically active males among the [illegible] population in each age group for each of the countries listed in [illegible] 29, may be found in "Age Structure and Labour Supply" [illegible]

*Table 28*

PERCENTAGES OF ECONOMICALLY ACTIVE MALES IN THE MALE POPULATION OF SPECIFIED AGE GROUPS, FOR TWO CATEGORIES OF COUNTRIES

| ...pe of country | Age (years) 10-14 | 15-19 | 20-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65 and over |
|---|---|---|---|---|---|---|---|---|
| ...der-developed countries [a] | 30.8 | 81.8 | 93.1 | 96.2 | 97.2 | 96.2 | 90.7 | 78.5 |
| ...dustrialized countries [b] | 4.9 | 68.9 | 90.7 | 96.2 | 97.2 | 94.9 | 83.5 | 40.6 |

*Source* "Age Structure and Labour Supply", *Proceedings of ... World Population Conference, Papers Volume III* (E/CONF ...415), pp 571-592

[a] Unweighted means of percentages for about ten countries having 60 per cent or more of economically active males engaged in agriculture and related activities

[b] Unweighted means for about twenty countries having 35 per cent or less of economically active males engaged in agriculture and related activities

*Table 29*

NUMBERS OF ECONOMICALLY INACTIVE MALES IN SIX SELECTED COUNTRIES

| | Algeria, Moslem population, 1948 | Brazil 1950 | China Taiwan 1940 [a] | Japan 1950 | United States 1950 | United Kingdom, 1951 [b] |
|---|---|---|---|---|---|---|
| ...onomically active males, all ages (thousands) | 2,048 | 14,610 | 1,491 | 22,316 | 43,091 | 15,662 |
| ...ctive males, all ages | | | | | | |
| Number (thousands) | 177.5 | 11,275 | 1,286 | 18,475 | 31,109 | 7,755 |
| Per 100 economically active males | 87 | 77 | 86 | 83 | 72 | 50 |
| ...ctive males, under 5 years of age | | | | | | |
| Number (thousands) | 552 | 4,240 | 493 | 5,716 | 8,274 | 2,133 |
| Per 100 economically active males, all ages | 27 | 29 | 33 | 26 | 19 | 14 |
| ...ctive males, 5-14 years of age | | | | | | |
| Number (thousands) | 1,046 | 5,750 | 665 | 9,014 | 12,271 | 3,467 |
| Per 100 economically active males, all ages | 51 | 39 | 45 | 40 | 28 | 22 |
| ...ctive males, 15-64 years of age | | | | | | |
| Number (thousands) | 159 | 1,084 | 98 | 2,955 | 7,209 | 675 |
| Per 100 economically active males, all ages | 8 | 8 | 6 | 13 | 17 | 4 |
| ...ctive males 65 years and over | | | | | | |
| Number (thousands) | 18 | 201 | 30 | 790 | 3,355 | 1,480 |
| Per 100 economically active males, all ages | 1 | 1 | 2 | 4 | 8 | 10 |

[a] Taiwanese population only

[b] Excluding Northern Ireland

...pan also has a high dependency ratio—the low level ... Japanese fertility is a relatively recent development ...d the dependent age-group 5-14 years is still swollen ... the higher birth-rates of earlier years The United [illegible]

...ited States represents that of an industrialized coun-... where the birth-rate is considerably higher than that ... the United Kingdom, but not nearly as high as the ...ical level for under-developed countries

A word of caution is needed in regard to the economic ...erpretation of ratios such as those shown in table 29 In the first place, the analysis is limited to the male population and does not take into account questions of female dependency Furthermore, the needs of dependants in different age-groups are not the same, nor do dependants of the same age have the same needs in countries where the conditions of life are very different. Pre-school children have the smallest needs [illegible] education which the comm... undertakes to provide In the under-developed coun-tries, the costs of childhood dependency are ...

*Table 30*

VITAL RATES AND PERCENTAGES OF MALE WORKERS ENGAGED IN AGRICULTURE, FOR SIX SELECTED COUNTRIES

| | Algeria Moslem population | Brazil | China Taiwan | Japan | United States | United Kingdom |
|---|---|---|---|---|---|---|
| Vital rates, 1950-1955 per 1 000 population | | | | | | |
| Birth rate | 45 [a] | 45 [a] | 50 | 20 | 25 | 15 |
| Death rate | 25 [a] | 20 [a] | 15 | 9 | 10 | 12 |
| Rate of natural increase | 20 [a] | 25 [a] | 35 | 11 | 15 | 4 |
| Percentage of economically active males engaged in agriculture, latest census | 86 | 63 | 63 [b] | 40 | 16 | 6 [c] |

[a] Estimates obtained by the method explained in footnote 7

[b] Taiwanese population only

[c] Excluding Northern Ireland

tively small, no doubt in part because the needs are more modest than in the industrialized countries, but also in part because the real needs are not as fully met. With due weighting of the numbers of dependants of different ages in the different countries, according to some estimate of needs, the burden of dependency in the under-developed countries would be found to be lighter, by comparison with that in the economically advanced countries, than the figures in table 29 would imply.

The relative number of dependants in the age-group 5-14 years is particularly important because of its bearing on the problem of education, which is an essential key to social and economic progress for the under developed countries in the long run. As table 29 shows, the number of inactive males in this age group is larger, in proportion to the size of the male labour force, in the under developed countries than in the economically more advanced countries that are listed. The significance of these ratios can be illustrated as follows. If, through a reduction of their birth rate, the Brazilians, the Moslems of Algeria and the Taiwanese reduced their ratio of school age (5 14 years) children per 100 workers to the level of that of the United Kingdom, the outlay on education per school age child could be approximately doubled without increasing the share of income devoted to this purpose [22]

The figures in table 29 do not, however, take account of the differing rates of population growth and their influence upon the volume of investment required each year to provide additional schools and other facilities for the increasing numbers of children. An increase in the number of children to be schooled brings a disproportionate increase in the cost of education, since the [illegible]

[illegible] takes this factor of increasing school population into account is shown in table 31. Here the annual increment to the male population aged 5-14, for each country, is given in terms of its ratio to the number of economically active males [23]. For instance in Brazil, each 1,000 work[ers] must bear the cost of expand[ing] the ed[ucation]al [illegible]

[illegible] 1,000 workers must provide annually for fifteen a[ddi]tional male school children. In the United Kingd[om] however, where the birth rate is much lower and population is increasing much more slowly, the num[ber] of additional schoolboys to be provided for each ye[ar] only one for every 1,000 workers.

A rapidly-growing population means that employ[ment] opportunities must be continuously expanded, in o[rder] to avoid mounting unemployment and underemp[loy]ment. In Taiwan, for instance, if the labour force [con]tinues to grow at the present rate of about 3 5 per [cent] per annum, and if mounting unemployment is to [be] avoided, the number of employment opportunities [must] be doubled in about 20 years, in countries like Mal[aya,] Turkey and Mexico, with a rate of natural increas[e of] around 3 per cent per annum, employment oppo[rtu]nities must be doubled in about 23 or 24 years, in B[razil] and numerous other under-developed countries wi[th a] rate of natural increase of about 2.5 per cent per ann[um] employment opportunities must be doubled in appr[oxi]mately 28 years. Increased investment in industry [and] agriculture, which, as mentioned above, is necessar[y to] maintain the *per capita* level of production in a rap[idly] growing population, does not necessarily guarantee [that] employment opportunities will equally expand, s[ince] with modern labour-saving technology, production [illegible] ids. The econo[illegible] therefore estab[illegible] [gr]eater industrial [illegible]

[22] See also *Preliminary Report on the World Social Situation*, pp 65-66

[23] [illegible] error is larger, since the age structure of the population in the countries is shifting as a result of past changes in birth-rates. In no case however, is the error large enough to have an important bearing on the comparison of results for the different countries shown

*Table 31*

UAL INCREMENT OF ECONOMICALLY INACTIVE MALES AGED 5-14 YEARS DUE TO POPULATION GROWTH, PER 1,000 ECONOMICALLY ACTIVE MALES, FOR SIX SELECTED COUNTRIES

| | *Algeria, Moslem population, 1948* | *Brazil 1950* | *China Taiwan, 1940 ª* | *Japan, 1950* | *United States 1950* | *United Kingdom 1951 ᵇ* |
|---|---|---|---|---|---|---|
| ıomıcally actıve males, all ages (thousands) | 2,048 | 14,610 | 1,491 | 22,316 | 43,091 | 15 662 |
| tıve males aged 5-14 years | | | | | | |
| umber (thousands) | 1,043 | 5,744 | 665 | 9 011 | 12,271 | 3 467 |
| nnual increment (thousands) ᶜ | 21 | 144 | 23 | 99 | 184 | 14 |
| nnual increment per 1 000 economically active males | 10 | 10 | 15 | 4 | 4 | 1 |

Taıwanese population only
Excluding Northern Ireland.
ᶜ Approximate estimates, see footnote 23

ıcultural production, but will also provide the neces- / number of new employment opportunities, whether abour-intensive industries or other types of economic .vity

n other fields, too, the under-developed countries face ılar problems connected with the trend of population using, medical and health facilities, and other social vices and amenities also require ever larger invest- nts as the rate of population increase rises In all se fields, the Governments of the under developed intries must plan and execute larger and larger 'elopment programmes if they are to meet the needs of population growth and at the same time provide for a rising level of living

The magnitude of these problems underlines a question that faces each of the under-developed countries · what measures for dealing with problems of population should be included in their programmes of social and economic development? The United Nations Population Commission, considering this question at its ninth session (February-March, 1957) recommended that each country study this question and decide its own policy [24]

[24] *Report of the Ninth Session of the Population Commission* (E/CN 9/144), para 96

Chapter III

# HEALTH CONDITIONS

## INTRODUCTION

Information on the state of health in the various countries is at present far from adequate for a satisfactory review of the health situation on a world wide basis

Accurate information regarding the important causes of death and the extent of medical and health services provided for the population is obtainable only from twenty five countries, largely countries that are economically developed Even in this limited number of countries statistics on morbidity are not commonly available and suitable indicators of health are still lacking

Thus, much of the available information does not reflect faithfully the state of health of the people, and many of the criteria commonly used as indications of an advanced state of health in certain countries are somewhat misleading

The present review is therefore only a brief outline of the general health situation of the world, and of some of the trends and new developments in the health field becoming apparent between 1951 and 1954

### THE GENERAL STATE OF HEALTH

The measurement of levels of health as a component of levels of living for the purposes of international comparison has been considered by experts [1] It was found that it is difficult to design suitable indicators of health from the knowledge at present available Among the statistical data commonly used to designate the state of health of a country or population, the experts found that

[illegible] utilization of these facilities and therefore do not necessarily reflect the state of health of the population [2]

Tables giving the general mortality, expectation of life and infant mortality rates are included in chapter [illegible] These show a continuing decline of the general and infa[illegible] mortality rates in practically all the countries liste[illegible] Also, the expectation of life at birth, on which data [illegible] available only in a very limited number of countries, increasing

From these and other data, it is evident that conditio[illegible] of physical health have been steadily improving throug[illegible] out the world in recent years, although there is [illegible] informational basis for drawing such a conclusion [illegible] regard to mental health The most rapid progress [illegible] indicated by the largest drops in mortality rates—[illegible] taken place in economically less developed areas whe[illegible] mass diseases such as malaria have been brought und[illegible] control While significant progress has also been ma[illegible] in developed areas, the fight against cancer and hea[illegible] disease, which tend to dominate the medical picture [illegible] these areas, has not yet produced such striking resul[illegible] in mortality reduction as have been obtained in the fig[illegible] against communicable diseases Thus, the develop[illegible] countries, having brought the major communicab[illegible] diseases increasingly under control, are now temporari[illegible] slowed in their health progress by the recalcitrant chara[illegible] ter of the degenerative diseases—and, one might ad[illegible] of senility itself—while the less developed countries mea[illegible] while are reaping the benefits of modern medicine [illegible] fields where specific causes, cures and preventives ha[illegible] become fairly well known

### A CONTROL AND PREVENTION OF DISEASES

In many countries, particularly in economically unde[illegible] developed regions, certain communicable diseases eith[illegible] in epidemic or endemic form are still a serious heal[illegible] problem, and constitute the main causes of mortal[illegible] and morbidity among the population In these countrie[illegible] however, statistics on communicable diseases are seldo[illegible] available or reliable Morbidity statistics in particul[illegible] on the diseases in question are usually lacking, even [illegible] countries with more advanced statistical services

Table 1 shows mortality rates from a group of com[illegible] municable diseases in a number of countries It wi[illegible] be noted from this table that, with the exception [illegible] Egypt where the information comes from limited are[illegible] and is probably incomplete, the rates seem to hav[illegible] continued to decline, they are lowest in Denmark and th[illegible] Netherlands in 1955 It should, however, be pointe[illegible] out that most of the countries listed are [illegible] call[illegible]

[1] [illegible] and 1954 Heal[illegible]

[2] World Health Organization *Report of the Study Group on the Measurement of Levels of Health*, WHO/PHA/25, 1955, p 13

*Table 1*

MORTALITY FROM ALL TYPES OF INFECTIVE AND PARASITIC DISEASES

(*Rates per 100 000 population*)

| Countries | Years | | | | | |
|---|---|---|---|---|---|---|
| | *1950* | *1951* | *1952* | *1953* | *1954* | *1955* |
| Australia | 32 0 | 32 4 | 25 3 | 21 3 | 18 9 | |
| Canada (Excl Yukon and the N W Territories) | 36 9 | 34 2 | 27 8 | 23 1 | 17 7 | 15 9 |
| Ceylon | 180 5 | 178 0 | 152 1 | 121 4 | 113 4 | 111 5 |
| Chile | 202 8 | 191 8 | 150 0 | 114 1 | 114 7 | |
| Colombia | | | | 167 2 | 146 1 | 163 4 |
| Denmark | 29 9 | 22 3 | 25 6 | 18 4 | 14 4 | 11 5 |
| Egypt (Localities with health bureau) | 86 8 | 99 0 | 72 0 | 91 1 | 55 5 | |
| El Salvador | 289 3 | 249 4 | 259 1 | 181 7 | | |
| Finland | 118 0 | 98 8 | 70 7 | 56 3 | 51 4 | 52 5 |
| France | 75 2 | 76 6 | 58 2 | 49 1 | 44 2 | 38 9 |
| Germany (Federal Republic) | | | 37 5 | 30 5 | 27 6 | |
| Italy | | 61 3 | 46 8 | 40 8 | 38 6 | |
| Japan | 201 9 | 164 1 | 123 1 | 103 1 | | 74 8 |
| Netherlands | 30 7 | 28 6 | 21 8 | 18 1 | 14 4 | 13 8 |
| New Zealand (Excl Maoris) | 35 1 | 30 4 | 27 5 | 22 4 | 16 8 | |
| Norway | | 37 5 | 30 7 | 27 5 | 23 2 | |
| Portugal | | | 129 7 | 91 4 | 87 0 | 89 0 |
| Sweden | | 28 5 | 22 1 | 22 5 | 17 5 | |
| Switzerland | | 47 0 | 36 3 | 33 7 | 35 2 | |
| United Kingdom | | | | | | |
| England and Wales | 47 5 | 41 5 | 32 6 | 28 8 | 24 8 | 21 7 |
| Scotland | 64 5 | 53 2 | 39 1 | 33 3 | 28 6 | 25 3 |
| United States of America | 34 2 | 30 9 | 26 9 | 21 5 | 18 5 | |

and technically well advanced, and that communicable diseases in general are therefore not a major health problem

### *Infective and parasitic diseases*

#### *Major epidemic diseases*

A concerted effort has been made by many Governments to ensure (with the minimum interference in international traffic) the maximum security against the spread of the major epidemic diseases (smallpox, plague, cholera, yellow fever, typhus and relapsing fever) from one country to another A set of international regulations on these diseases which consolidated and brought up to date some thirteen international agreements dating back to 1903, has been adopted as the International Sanitary Regulations (WHO Regulations No 2), and by the end of 1954, sixty one States and seventy-three Trust and Non Self Governing Territories had agreed to carry out the provisions of these Regulations without reservation, while eight States and two Territories accepted them with certain reservations [a]

Except for smallpox, there have been no recent serious outbreaks of the major epidemic diseases in any part of the world, large numbers of people living in areas where smallpox and cholera are endemic, however, are still threatened by these diseases There have been comparatively few human cases of the plague, except in India, Burma and Indonesia, it has not invaded fresh areas Yellow fever has been mainly confined to the countries where it is endemic, and there the disease has appeared to be generally under control However, the appearance in 1954 of yellow fever in Trinidad (where there had been no known cases of this disease for the previous forty years), and its northward spread in Central America, reaffirmed the need for continuous vigilance Typhus and relapsing fever have been reported in certain countries, mostly as sporadic cases with few more important outbreaks

It should be noted that certain of these communicable diseases, such as the plague and yellow fever, appear to exist more or less permanently in wildlife, which provides a reservoir of infection that may suddenly start to spread the disease among domestic animals and human beings Thus, the sporadic, although strictly limited, outbreaks

[a] World Health Organization *Annual Report of the Director-General for 1954*, Official Records of the World Health Organization, No 59, p 41

the Americas, and Asia[4] The recent reappearance of yellow fever in the Americas may be due to the perpetuation of the disease by the continuing infection of monkeys in jungle areas and its outbreak from the jungle into inhabited areas In the case of outbreaks both in Trinidad (1954) and in continental Central America (1950-54), the origin in fact was traced to infection by jungle mosquitoes of a species other than the traditional carrier, Aëdes Aegypti, which had been exterminated in inhabited areas (infected jungle mosquitoes have recently been discovered north of the Rio Grande) The Central American outbreak was preceded by an epidemic among jungle monkeys (mostly howler and spider monkeys) which was accompanied by a very high mortality of these animals[5] There are vast areas in South America and Africa where yellow fever is known to be endemic[6]

*Virus diseases*

During the period under study, epidemics of *influenza* have been widely reported Among countries reporting the greatest prevalence were Austria, Denmark, Finland, Greece, Italy, Spain, Sweden, Switzerland and the United Kingdom in the European area, Canada, Guatemala, Uruguay and Venezuela in the Americas, Ethiopia and Madagascar in Africa, Hawaii, Japan and the Philippines in the Pacific area

In some of the virus infections the symptoms vary in nature and severity in different epidemics Close study of the symptoms and careful research on the nature of the virus causing a particular outbreak must therefore be continued in order to devise effective precautionary measures Fortunately, specific control measures are now available for some of these diseases To be effective, however, the virus strains used in the vaccine must be related to the epidemic strains, and the vaccine administered at the appropriate moment A number of Governments have therefore set up special centres which keep in close touch with each other and report observations on the early development of the disease to the World Health Organization There are at present fifty-seven influenza centres The World Health Organization has also designed six regional centres to assist and co-ordinate similar studies on poliomyelitis[7]

Until the very recent introduction of vaccination, *poliomyelitis*—especially in its paralytic form—has been practically the only major contagious disease with an increasing rate of incidence[8] It has been affecting hitherto relatively immune groups of the population Forty or fifty years ago the maximum attack-rates were nearly always recorded in the 0-4 years age group, but have since shifted to higher age groups In Sweden, for example, the children most affected by poliomyelitis are now in the 7-15 age-group, and, in some yearly records, even the 15-25 age-group[9] Poliomyelitis has not only been affecting a wider range of the population in countries where the disease has long been recognized,[10] but it has also been appearing in epidemic form for the first time in more and more countries, including economically less developed countries[11] There has been a recent intensive outbreak of poliomyelitis in Argentina and an unusually high incidence in certain parts of Serbia (in Yugoslavia)

Considerable progress has been made in recent years, however, towards control of poliomyelitis through vaccination Vaccination campaigns have been especially successful where the series of injections necessary for immunization has been completed before the start of the annual poliomyelitis season[12]

As poliomyelitis has come under increasing study, another but similar virus disease, known as *meningo-encephalitis*, has been recognized in areas formerly believed free from infection Several outbreaks of this disease have occurred in Central European countries since 1952, its clinical and pathological similarity to poliomyelitis may have prevented a proper diagnosis of possible earlier outbreaks[13]

*Tuberculosis*

In the case of pulmonary tuberculosis, the death-rate seems to have continued to fall—in some cases dramatically—during the last few years in those parts of the world where reliable statistics are available

When considering the figures shown in table 2 it should be remembered that the introduction of chemotherapy during recent years, while not achieving a complete cure, may have prevented many people from dying of tuberculosis The reduction of the mortality rate, therefore, does not [illegible] the disease [illegible] ould not be [illegible] disease in different countries In fact, in many countries tuberculosis morbidity has not decreased as much as mortality Where the death-rates have dropped by about half, the number of reported cases has dropped little, and the number of known infectious cases has sometimes even increased[14] Adding to this the fact that the extent and behaviour of tuberculosis among the great majority of the world's population is at present unknown, the goal of control of this disease may still be far off, but scientifically planned surveys are now being undertaken in parts

[4] R Pollitzer *History and Present Distribution of Plague*, World Health Organization Monograph Series No 22, 1954

[5] J Austin Kerr "The Last Refuge of Yellow Fever", *Courrier*, vol VIII, No 12 (Paris UNESCO, 1956), p 26

[6] *Epidemic Diseases* (Memorandum by the World Health Organization) United Nations A/AC 35/L 88 para 21

[7] World Health Organization, *Annual Report of the Director General for 1954* op cit, p 14

[8] J M S de Gear, *Poliomyelitis in Underdeveloped Countries*, World Health Organization Monograph Series No 26 1955, p 31

[9] John R Paul, *Epidemiology of Poliomyelitis, ibid*, p 12

[10] M J Freyche and J Nelson, *Incidence of Poliomyelitis since 1920, ibid*, pp 59-106

[11] J M S de Gear, *op cit*, pp 34-38

[12] *Poliomyelitis Vaccination A Preliminary Review*, a report prepared by a World Health Organization Expert Committee on Poliomyelitis (Geneva 1956)

[13] "Virus Meningo-Encephalitis and Poliomyelitis", *Bulletin of the World Health Organization*, vol 12, No 4, 1955

[14] World Health Organization, *Annual Report of the Director-General for 1954*, op cit, p 7

*Table 2*

MORTALITY FROM TUBERCULOSIS, ALL FORMS

(*Rates per 100 000 population*)

| | Years | | | | | |
|---|---|---|---|---|---|---|
| *untries* | *1950* | *1951* | *1952* | *1953* | *1954* | *1955* |
| ustralia | 20 5 | 18 3 | 14 9 | 11 0 | 10 0 | |
| anada | | | | | | |
| (Excl. Yukon and the N W Territories) | 26 2 | 24 4 | 17 1 | 12 3 | 10 3 | 9 0 |
| eylon | 53 3 | 50 1 | 38 4 | 29 6 | 23 6 | 21 8 |
| hile | 153 4 | 143 1 | 109 1 | 78 0 | 69 9 | |
| olombia | 36 2 | 36 3 | 30 8 | 26 2 | 26 1 | 28 2 |
| enmark | 13 8 | 13 3 | 10 9 | 8 8 | 7 7 | 6 2 |
| gypt | | | | | | |
| (Localities with health bureau) | 48 9 | 43 7 | 36 4 | 29 4 | 26 2 | |
| l Salvador | 38 8 | 35 9 | 32 6 | 27 6 | | |
| inland | 93 6 | 83 8 | 57 7 | 44 6 | 40 5 | 41 8 |
| rance | 58 1 | 60 9 | 43 8 | 36 6 | 32 3 | 31 3 |
| ermany | | | | | | |
| (Federal Republic) | 39 4 | 37 1 | 27 4 | 21 6 | 20 4 | |
| aly | 42 6 | 42 5 | 27 7 | 23 6 | 23 0 | |
| apan | 146 4 | 110 7 | 82.5 | 66 7 | 62 4 | 52.4 |
| etherlands | 19 0 | 16 1 | 12 3 | 9 2 | 7 5 | 6 7 |
| ew Zealand | | | | | | |
| (Excl Maoris) | 22 9 | 20 9 | 14 5 | 12 4 | 10 4 | |
| orway | 29 0 | 23 8 | 20 0 | 16 0 | 15 3 | |
| ortugal | 143 6 | 133 1 | 96 8 | 62 7 | 61 5 | 63 0 |
| pain | 105 1 | 93 3 | 56 4 | 40 4 | | |
| weden | 22 1 | 22 9 | 17 3 | 14 3 | 13 0 | |
| witzerland | 35 1 | 36 0 | 25 4 | 23 4 | 22 1 | |
| United Kingdom | | | | | | |
| England and Wales | 36 4 | 31 5 | 24 1 | 20 2 | 17 8 | 14 6 |
| Scotland | 53 6 | 42.6 | 31 5 | 26 2 | 22 0 | 19 2 |
| United States of America | 22 5 | 20 1 | 15 8 | 12 3 | 10 2 | |

f Africa and Asia which will provide further valuable nformation on which sound tuberculosis control programmes may be based In some of these countries he disease seems to be less common in rural and more common in industrial areas than was thought

The management of pulmonary tuberculosis is rapidly changing from a clinical to a public health approach The use of BCG vaccination as a protective measure against tuberculosis is becoming more and more widespread For instance, in India an annual average of 25 million people are tuberculin-tested, out of which approximately 10 million receive BCG vaccination The use of drugs in ambulant patients for therapeutic or prophylactic purposes as a public health control measure depends on the wide-spread availability of an effective, non-toxic drug that will be cheap and easy to produce, to distribute and to take New drugs are bringing such an approach to tuberculosis control within sight

*Pneumonia*

There has been a striking decline in the number of deaths from pneumonia since penicillin and other antibiotics have become available This is demonstrated by the figures in table 3, taken from a recent WHO survey [15] Nevertheless, pneumonia still ranks among the diseases causing the greatest number of deaths even in the developed countries where antibiotics are widely used, and in particular is a leading cause of death among infants and among the aged

Figures comparing 1936-38 and the more recent rates of pneumonia deaths in twenty countries show that the decrease has been moderate among infants under one year of age, extremely important among children and adults, and much less marked among the aged *Among* people over eighty in a few countries, such as France, Finland, the United Kingdom and Portugal, an increase in pneumonia deaths is recorded for certain years

Of the different forms of pneumonia, the *one* responsible today for the greatest mortality is broncho-pneumonia in the majority of the reporting countries, including Canada, Finland, Denmark, the United States, Ireland, Italy, Norway, the Netherlands, the United Kingdom, Sweden, Switzerland, Australia and New Zealand In Japan, however, lobar pneumonia causes most deaths

[15] See " Mortality from Pneumonia ", World Health Organization *Epidemiological and Vital Statistics Report*, vol. 9, No 9, 1956

*Table 3*

MORTALITY FROM PNEUMONIA BY SEX IN 1936-1938 AND AT MORE RECENT TIMES

(*Rates per 100 000 population*)

| Country | | Male | Female |
|---|---|---|---|
| Australia | 1936-38 | 72 8 | 54 0 |
| | 1951 53 | 37 7 | 31 8 |
| Canada | 1936-38 | 72 9 | 62 6 |
| | 1952 54 | 37 2 | 29 7 |
| Denmark | 1936-38 | 95 4 | 85 9 |
| | 1952 54 | 23 3 | 24 0 |
| Finland | 1936-38 | 99 7 | 83 6 |
| | 1951 53 ᵃ | 42 0 | 48 0 |
| France | 1936 | 75 9 | 61 9 |
| | 1952 54 | 57 9 | 59 1 |
| Germany | | | |
| Territory at the time | 1938 | 96 1 | 73 8 |
| Federal Republic | 1952 54 | 46 5 | 39 6 |
| Ireland | 1936-38 | 91 1 | 76 1 |
| | 1951 53 | 39 7 | 37 0 |
| Italy | 1936-38 | 227 1 | 187 8 |
| | 1951 53 | 69 3 | 61 6 |
| Japan | 1936 | 170 4 | 148 9 |
| | 1951 53 ᵃ | 52 0 | 45 4 |
| Netherlands | 1936-38 | 65 6 | 56 0 |
| | 1952 54 | 23 3 | 22 4 |
| New Zealand | | | |
| Excluding Maoris | 1936-38 | 67 1 | 37 7 |
| | *1951 53* | 24 5 | 20 6 |
| Maoris | 1936-38 | 455 9 | 405 8 |
| | 1950-52 | 158 5 | 144 4 |
| Norway | 1936-38 | 98 7 | 102.6 |
| | 1951 53 ᵃ | 37 9 | 47 0 |
| Portugal | 1937 | 132 7 | 110 8 |
| | 1952 54 ᵃ | 81 2 | 67 3 |
| Sweden | 1936-38 | 100 2 | 96 1 |
| | 1951 53 ᵃ | 36 0 | 39 0 |
| Switzerland | 1936-38 | 74 0 | 66 8 |
| | 1951 53 ᵃ | 24 5 | 25 7 |
| Union of South Africa (European population) | 1936 38 | 102 8 | 69 8 |
| | 1951 53 ᵃ | 57 0 | 43 2 |
| United Kingdom | | | |
| England and Wales | 1936-38 | 83 0 | 54 1 |
| | 1952 54 | 49 2 | 41 8 |
| Scotland | 1936-38 | 110 2 | 71 9 |
| | 1952 54 | 40 7 | 33 0 |
| Northern Ireland | 1936-38 | 93 0 | 72 1 |
| | 1952 54 ᵃ | 44 1 | 37 6 |
| United States of America | 1936-38 | 93 9 | 70 2 |
| | 1951 53 | 33 2 | 24 1 |

ᵃ Excluding pneumonia of the newborn

### *Malaria*

The extensive DDT residual spray work carried out in many countries has greatly increased the number of people protected against this disease For example, in six countries of Asia (Afghanistan Burma Ceylon, India, Indonesia and Thailand) recent estimates [16] indicate that the malaria control programmes have already directly protected 121 million people out of 250 million living in malarious areas In a few countries and territories of Africa (such as French West Africa, French Cameroons, Liberia, Nigeria and Tanganyika), pilot projects have been initiated in order to collect essential information for planning large scale anti malaria programmes

The methods of preventing malaria have had to be modified recently because, as noted in previous reports,[17] it has been discovered that some anopheles mosquitoes—known as carriers of the disease—in certain areas are developing a resistance to insecticides This has resulted in a change of approach to malaria control The practice now aims at stopping the transmission of the disease during three or four consecutive years by intensive DDT residual spraying, and then discontinuing the spraying completely in order to prevent the development of resistant anopheles mosquitoes The new approach is based on recognition of the fact that " Malaria eradication does not mean or require eradication of the anopheline species that carry the disease in a given area It only means eradication of the malaria parasites "[18] Malaria when it does not kill, is spontaneously self-curing Inasmuch as infection lasts generally no longer than three or four years at the most except in certain rare forms, the effort is made to establish complete control of the mosquitoes for that period of time through intensive DDT-residual spraying If the life-and infection cycle in the parasite to mosquito to human being " circuit is thus interrupted and the human population ridden of malaria parasites, mosquitoes may well remain or reappear in the inhabited areas after residual spraying is discontinued, but they will not be disease carriers, because they will find no parasite infected human beings to bite Thus, eradication of the disease has practically been achieved throughout, or in large areas of, British and French Guiana, Italy, the United States, Argentina, Ceylon, Thailand and Venezuela For the success of this procedure, it is essential that complete malaria control be achieved during the three or four year period during which previously infected human beings still carry the malaria parasites, this implies the necessity of regularly spraying even remote villages, including those where malaria rates have been low Moreover, the controlled areas should be as large as possible, so as to minimize the possibility of the reintroduction of malaria parasites through the movements of infected human beings or mosquitoes

In the remaining parts of the world, malaria control or eradication work has been initiated, or the disease has already become insignificant as a public health problem

### *Yaws and syphilis*

It is estimated that there are today some 50 000 000 cases of yaws one of the treponematoses caused by a

[16] Documents presented to the ninth session of the Regional Committee for South East Asia World Health Organization August 1956

[17] *International Survey of Programmes of Social Development* (United Nations publication Sales No 1955 IV 8) p 28

[18] E J Pampana " Changing Strategy in Malaria Control ", *Bulletin of the World Health Organization* vol 11 No 4-5 1954 p 514

spirochaete similar to that of syphilis The eradication of yaws and endemic syphilis has been a major target in many projects organized by national health administrations, assisted by the World Health Organization and other international organizations, particularly UNICEF In the Cameroons, the Gold Coast, Haiti, India, Indonesia, Laos, Liberia, Malaya, Nigeria, the Pacific Islands, Sierra Leone and Thailand, yaws control programmes are now being carried out and are in various stages of completion Control of endemic syphilis is in progress in Bechuanaland and Iraq, and the eradication of the disease is being achieved in Yugoslavia By the end of 1955, by means of internationally assisted campaigns, no less than 50,000,000 persons had been examined and 15,000,000 treated with penicillin By eliminating yaws, the well-being of the afflicted people is improved and at the same time their potentiality for productive work is increased However, concerted and persistent action by national bodies and community effort still needs to be encouraged In developed countries the prevalence of venereal syphilis has fallen dramatically since penicillin was introduced

*Bilharziasis*

Because of the intensity of its morbid symptoms, its socio-economic aspects and its very wide distribution throughout the world, bilharziasis is one of the most important helminthiases (diseases caused by worms in blood vessels) It is estimated that there are about 150,000,000 infested people in the world suffering from this disease, in the transmission of which certain snails act as intermediate hosts The infestation rate is in fact a reliable indicator of poor environmental sanitation in any area In many countries where bilharziasis is a problem, special efforts have been made to control this disease. Recent surveys have been made with WHO assistance on the distribution and importance of bilharziasis in Africa, in the Eastern Mediterranean Region and in certain regions of the Western Pacific For example, the classification of snail vectors, the intermediary hosts of the bilharziasis parasites, and the study of their ecology have been added to the understanding of the epidemiology of the disease and the selection of control methods The discovery of new molluscicides (cyclic phenol derivatives) to control snails and the results of their use in bilharziasis control give hope of more effective and less costly control measures Despite these advances, however, the problems associated with the identification and the ecology of the snails have not been completely solved, special research to find a more efficient drug and other molluscicides with a residual effect is necessary

*Filariasis*

Considerable progress has been made in the control of onchocerciasis,[19] the blinding filariasis This disease, which affects nearly 20 million people in tropical Africa, as well as in Central and South America, is spread by several species of tiny flies, belonging to the genus *Simulium*, which carry the microscopic young forms (microfilariae) of the worm, *Onchocerca volvulus*, known to cause the disease When the infected *Simulium* fly bites human beings, it transmits the microfilariae which reach adult stage in the human host They produce subcutaneous nodules, generally attached to bones in several parts of the body The adult worms produce hundreds of thousands of new microfilariae in the nodules, which invade the tissues of the skin and the eyes through lymphatic circulation, producing characteristic lesions If the disease is not halted it may in time so damage the eye tissue that vision is seriously impaired and total blindness may result in many cases

Because of the high incidence of blindness in villages in river valleys of the Sudan, East Africa, Nigeria and the Gold Coast, the disease has become known there as "river blindness" Similar conditions exist in other African territories, the association of onchocerciasis with rivers is due to the fact that *Simulium* develops in quick-running waters, where the adults deposit their eggs and the young forms live attached to submerged vegetation and stones One species of *Simulium* deposits its eggs on crabs of a certain kind which act as host to the larvae and pupae

The control of onchocerciasis is now possible, since there are effective and practical methods of fighting both the parasite worm and its vectors[20] In Guatemala and Mexico, successful campaigns have been conducted to reduce the incidence of onchocercal blindness and other disabling eye lesions by surgical removal of the nodules, the use of new drugs in mass campaigns in endemic areas of Africa and the Americas has also made considerable progress in the treatment and control of this disease A successful campaign through the extermination of *Simulium* with insecticides (DDT) has been carried out in certain districts of Kenya while in 1945 a survey carried out among children below the age of six years showed an infection rate of 36 per cent, re examination in 1953, following successful control of the vector, showed that not a single child in this age-group had contracted the disease[21] Similar campaigns are being started in the Belgian Congo, French West and Equatorial Africa

It is estimated that more than 250,000,000 people are affected by the other filariases—including infections which can produce elephantiases—in the tropical areas of the world The results of treatment by piperazine derivative drugs promise new possibilities for the control of the parasites, if the treatment campaigns can be organized on a mass scale Successful experiments have already been carried out in the Pacific area Vector control measures have also been successfully employed in certain areas of endemicity and against certain species of vectors, but no generalization of the techniques used is yet possible, owing to the different biology of the many species of vectors involved

[19] "Onchocerciasis A New Field of WHO Activities" *Journal of the American Medical Association* vol 10 No 7 J pp 226-230

[20] World Health Organization *Report of* ... *...cerciasis*, WHO Technical Report ...

*Trachoma*

Trachoma and infectious conjunctivitis affect no less than 400,000,000 people all over the world These diseases present a vast social problem, because of the high percentage of blindness or disabling eye lesions they produce

Trachoma, in particular, may reach extremely high percentages of infection among children in many of the areas where it is prevalent In various territories of North Africa, where practically all the adult population was found to be suffering from the disease or from its sequelae, the percentage of infection among children of pre school age has been found to be as high as 70 to 90 per cent In India, 78 per cent of rural school children in selected villages were found infected in Uttar Pradesh and 48 per cent in East Punjab, in Taiwan, in a pilot project area, 48 out of every hundred children were found to be trachoma sufferers New areas of endemicity of this disease have been detected in the course of surveys carried out in South Africa and Western Australian territory *Satisfactory results obtained in the treat*ment of trachoma and infectious conjunctivitis by some sulfonamides and antibiotics, the latter being especially effective, have encouraged mass campaigns on a national scale Successful initial results have been obtained in Morocco, Taiwan and Tunisia, and new campaigns of this type have been started in Egypt, Indonesia, Spain and Yugoslavia

*Leprosy*

The effectiveness of sulfones in the treatment of leprosy, together with the recognition that this disease is not, in most cases, as highly infectious as it was formerly believed to be, has led to revolutionary changes in the measures used for its control The old policy of compulsory life long segregation of all recognized cases has been replaced in most countries by one which aims at the *early detection of the disease, temporary isolation of* selected infectious patients, and ambulatory or domicili ary treatment of most of the others

The very progress in the treatment of leprosy has led to an increase in the number of leprosy sufferers seeking such treatment, this is due to the enhanced confidence in new methods of treatment and the disappearance of the fear that application for medical assistance would result in confinement in leprosaries Most of these institutions are, however, still in operation because of the neces sity to continue the segregation of advanced cases, includ ing those discovered too late for successful treatment by new methods It has also been found that leprosy patients cured after many years of confinement are often unable to shift for themselves and have to be kept in the leprosaries [22] In a number of countries today, the patients are no longer isolated, but reside in relative liberty in the proximity of the place where they are registered for treatment reporting for treatment at appropriate times [23]

In spite of the progress already achieved, leprosy remains an important health problem in many countries of Africa [24] and other under developed areas Now that there is less concealment of the disease, the total number of patients throughout the world has had to be revised upwards, from a WHO estimate of between two and seven million in 1952, to a total of 10 to 12 million today

Leprosy control measures have been carried out by a number of Governments, sometimes in combined efforts —for example, in Brazil, Burma, Ceylon, Ethiopia, French Equatorial and West Africa, India, Indonesia, Nigeria, the Philippines, Thailand and Venezuela The rehabilitation problems of the cured patient are also attracting a great deal of attention In particular, the social problems caused by the fear and social stigma attached to this disease have to be tackled, and the public educated to accept the cured patient as a full member of society

*Trypanosomiasis*

Most of Africa south of the Sahara (except the southern part of the Union of South Africa) is affected by diseases known as trypanosomiases which are transmitted by tse tse flies Trypanosomiases are caused by several species of minute protozoa, called trypanosomes There are two of these species that cause somewhat different forms of sleeping disease in human beings, and that also affect domestic animals, primarily cattle (other species affect animals only) Many wild animals may carry in their blood parasitic trypanosomes which are harmless to these animals but dangerous to man The wild animals therefore serve as a reservoir of infection, since the tse tse fly transmits the trypanosomes from them to man or to domestic animals. The tendency of human populations to migrate into the relatively small areas that are free of the disease-carrying tse-tse flies has caused these areas to be overcrowded, in view of the type of agriculture practiced, and low in *per capita* agricultural yield Other areas are infected by trypanosomes which, while relatively harmless to human beings, are fatal to cattle, in these areas, the human population, although not exposed to sleeping disease, is apt to be deprived of animal protein in the diet, of draught animals for work and of fertilizer needed to cultivate the fields In short, the tse tse fly, directly through the debilitation it causes, or indirectly, has a serious effect upon the productivity of the African rural population and presents one of the greatest barriers to African progress [25]

Until recently, there were only two basic methods of eliminating tse tse flies These were either to kill off the wild animals which provided the tse-tse fly with its food, or to cut down the forests, woodland, or bush which provided its home The application of the first of these methods resulted in a serious depletion of Afri-

[22] *Social Conditions in Non Self Governing Territories Public Health Communicable Diseases* (Memorandum by the World Health Organization), United Nations A/AC 35/L 205, paras 10 and 11

[23] *Ibid*, para 12

[24] *Ibid*, paras 8 and 9

[25] J Ford (Director, East Africa Tse-Tse and Trypanosomiasis Research and Reclamation Organization) "The Sleep that Kills", *Courrier*, vol VIII, No 12 (Paris, UNESCO, 1956) pp 12 14

can wildlife, but did not lead to satisfactory control of the tse tse fly, nor has the second of these methods proved successful In recent years, more efficient methods of dealing with this disease have been employed

The incidence of trypanosomiasis or sleeping sickness has declined in many endemic areas in Africa, thanks to chemo-prophylaxis and the public health measures adopted In other more limited regions, the use of residual insecticides has reduced or sometimes eradicated the tse-tse fly Nevertheless, numerous endemic foci and reservoirs of infection continue to exist and impel health authorities to persevere in their control measures

The administration of chemical drugs to human beings who have incurred sleeping sickness has also become more general in recent years While, prior to the introduction of these drugs, sleeping sickness was almost inevitably fatal, it may now be cured by use of the drugs at an early stage of the disease some of these same drugs may also be administered prophylactically, at least against one of the forms of the disease

### *Degenerative diseases*

Most of the infectious diseases considered in the preceding paragraphs are health problems today primarily in the economically less developed countries In the more developed countries where the communicable diseases that were major health problems fifty years ago are no longer prevalent, the chronic degenerative and malignant diseases have become important causes of mortality and morbidity As the life span extends, these diseases and the care of aged persons become the main preoccupation of most of the national health authorities During recent years, in many of the technologically advanced countries, increasing efforts have been directed to research on the etiology and prevention of the degenerative and malignant diseases such as cancer and atherosclerosis So far, no practical solution has been found to the problem of the prevention of these diseases A number of countries, principally the United States, have advocated the " multiple screening " process as a means to detect early, and therefore treat more effectively, some of the degenerative and malignant diseases

In the consideration of this group of diseases, special attention should be called to the fact that statistics *shown in the following tables refer almost exclusively* to the economically and technologically advanced countries, and therefore do not have world wide coverage

### *Heart disease*

Table 4 shows the rates of mortality from cardiovascular diseases in twenty two countries It should be kept in mind that cardiovascular diseases, like cancer

*Table 4*

MORTALITY FROM CARDIO-VASCULAR DISEASES

(*Rates per 100 000 population*)

| | Years | | | | | |
|---|---|---|---|---|---|---|
| *Countries* | *1950* | *1951* | *1952* | *1953* | *1954* | *1955* |
| Australia | 437 2 | 452 1 | 453 3 | 437 0 | 441 9 | |
| Canada | | | | | | |
| (Excl. Yukon and N W Territories) | 382 8 | 382 7 | 383 8 | 384 5 | 370 5 | 373 5 |
| Ceylon | 77 5 | 73 2 | 71 2 | 67 7 | 67 7 | 82 0 |
| Chile | 231 6 | | 183 3 | 197 8 | 152 8 | |
| Colombia | | | | 84 2 | 94 6 | 104 8 |
| Denmark | | 367 3 | 391 1 | 384 9 | 392 1 | 390 9 |
| Egypt | | | | | | |
| (Localities with health bureau) | 94 0 | 98 2 | 96 2 | 90 3 | 95 7 | |
| El Salvador | 38 2 | 37 9 | 37 5 | 40 4 | | |
| Finland | 317 9 | 354 4 | 387 6 | 388 6 | 382 3 | 403 1 |
| France | 363 3 | 378 4 | 357 9 | 377 2 | 363 0 | |
| Germany | | | | | | |
| (Federal Republic) | | | 342 1 | 359 6 | 365 8 | 365 5 |
| Italy | | 344 2 | 351 5 | 373 3 | 354 2 | |
| Japan | 183 5 | 200 9 | 202 0 | 211 0 | | 208 6 |
| Netherlands | 262 4 | 262 7 | 266 7 | 230 9 | 291 4 | [illegible] |
| New Zealand | | | | | | |
| (Excl Maoris) | 459 7 | 473 1 | 453 5 | 445 2 | 439 2 | |
| Norway | | 302 0 | 328 8 | 326 6 | 348 8 | |
| Poland | 224 0 | | | 212 0 | | |
| Portugal | | | 268 4 | 256 4 | 292.5 | 279 2 |
| Sweden | | 404 3 | 410 0 | 430 6 | 438 6 | |
| Switzerland | | 413 4 | 412 5 | 423 9 | 425 7 | |
| United Kingdom | | | | | | |
| England and Wales | 540 1 | 571 6 | 541 4 | 534 1 | 549 9 | 563 9 |
| Scotland | 572 6 | 612.5 | 590 1 | 567 6 | [illegible] | 609 1 |
| United States of America | 467 4 | 472.1 | 472.3 | 476 3 | | |

affect mainly middle aged and older persons their incidence and the resulting mortality rates in particular countries are therefore, to a considerable extent affected by the age distribution of the population There may be relatively low over all mortality from cardiovascular diseases in a country with a high birth rate and therefore a high percentage of young people in its population while at the same time age specific death rates from these diseases show them to be important causes of death Thus over all mortality from heart disease is much lower in the Netherlands than in Norway (male rates per 100 000 of total male population are 306 0 and 358 8 respectively) but mortality for men above forty is approximately the same in both countries (932 in the Netherlands and 936 in Norway) this apparent discrepancy is due to the fact that young people and children constitute a much higher percentage of the population in the Netherlands than in Norway

*Table 5* *

MORTALITY FROM ALL CARDIO-VASCULAR DISEASES IN SELECTED COUNTRIES IN 1954 ACCORDING TO SEX AND AGE

*(Rates per 100 000 population of each sex and of corresponding age-group)*

M = male F = female

| *Country* | | *40 and over* | *Age groups in years* 40-44 | 55-59 | 70-74 | *85 and over* |
|---|---|---|---|---|---|---|
| Australia | M | 1 436 | 131 | 916 | 3 946 | 17 217 |
| | F | 1 186 | 82 | 453 | 2 614 | 16 488 |
| Austria | M | 1 135 | 80 | 583 | 2 999 | 11 500 |
| | F | 1 015 | 41 | 341 | 2 495 | 12 164 |
| Canada | M | 1 372 | 147 | 870 | 3 203 | 14 695 |
| | F | 1 094 | 65 | 399 | 2 361 | 13 987 |
| Denmark | M | 1 119 | 63 | 508 | 2 816 | 14 222 |
| | F | 1 037 | 37 | 300 | 2 519 | 14 013 |
| Finland | M | 1 737 | 158 | 931 | 3 919 | 12 385 |
| | F | 1 118 | 80 | 440 | 3 317 | 12 557 |
| France | M | 957 | 74 | 492 | 2 446 | 9 29( |
| | F | 846 | 50 | 272 | 1 646 | 6 809 |
| Germany (Federal Republic) | M | 986 | 66 | 531 | 2 733 | 10 464 |
| | F | 866 | 44 | 291 | 2 533 | 10 088 |
| Ireland | M | 1 56 | 146 | 761 | 3 317 | 12 315 |
| | F | 1 404 | 107 | 570 | 2 812 | 10 897 |
| Israel | M | 835 | 81 | 671 | 3 447 | — |
| | F | 713 | 80 | 386 | 2 881 | — |
| Italy * | M | 1 100 | 73 | 532 | 2 917 | 13 388 |
| | F | 1 074 | 65 | 349 | 2 754 | 12 272 |
| Japan | M | 805 | 86 | 635 | 2 907 | 5 719 |
| | F | 700 | 83 | 447 | 2 144 | 4 579 |
| Netherlands | M | 932 | 49 | 423 | 2 302 | 12 494 |
| | F | 875 | 31 | 378 | 2 176 | 12 170 |
| New Zealand (excl. Maoris) | M | 1 395 | 87 | 763 | 3 327 | 14 052 |
| | F | 1 148 | 58 | 438 | 2 468 | 14 052 |
| Norway | M | 936 | 58 | 403 | 2 751 | 10 086 |
| | F | 939 | 29 | 231 | 1 950 | 11 860 |
| Sweden | M | 1 145 | 61 | 500 | 2 852 | 13 329 |
| | F | 1 105 | 44 | 317 | 2 442 | 13 160 |
| Switzerland | M | 1 113 | 75 | 537 | 2 978 | 15 562 |
| | F | 1 103 | 47 | 346 | 2,507 | 15 783 |
| United Kingdom: England and Wales | M | 1 337 | 98 | 701 | 3 639 | 15 723 |
| | F | 1,246 | 61 | 350 | 2,523 | 14 061 |
| Northern Ireland | M | 1 569 | 112 | 791 | 4 124 | 15 625 |
| | F | 1 393 | 89 | 515 | 3 251 | 13 711 |
| Scotland | M | 1 632 | 131 | 956 | 4 092 | 18 072 |
| | F | 1 459 | 93 | 507 | 3 087 | 16 511 |
| United States of America | M | 1 530 | 185 | 1 016 | 3 601 | 13 201 |
| | F | 1 176 | 88 | 459 | 2 450 | 12 905 |

* Condensed from table 2 in World Health Organization *Epidemiological and Vital Statistics Report* vol 9 No 10 1956

* Approximate rates based on the population estimated on provisional figures of the 1951 Census.

Table 5 shows that in almost every country for which data are available, and for all age groups, male mortality from cardiovascular diseases is higher, sometimes much higher, than female mortality, although the differential declines at the *oldest* age levels Mortality from these diseases for both sexes increases *rapidly* with advancing age

Even within specific countries, a wide range in mortality rates according to the type of locality may be found with *female mortality* generally lower in each locality than male *Thus, according to a survey made by the* United States Public Health Service in New York ...
male mortality from heart disease ...
age group during 194...
tants while in
ity from heart ...ork and
79 2 in New M...

Degenerative heart disease is now the *most frequent* cause of death in Northern America in most of Europe and among the more prosperous segments of the population in many other parts of the world It is not considered that the increasing dominance of degenerative heart diseases in these areas can be explained solely as the result of the reduction of other causes of mortality or of the changing age structure of the population The mode of life appears to be involved, and there is increasing evidence that the type of diet consumed in industrially advanced, high income areas may play an important role *in the development of degenerative heart* diseases [27]

[26] Philip E Enterline and William A Stewart Geographic Patterns in Death from Coronary Heart Disease " *Public Health Reports* Vol 71 No 9 September 1956

[27] World Health Organization *Joint FAO/WHO Expert Committee on Nutrition* Fourth Report WHO Technical Report Series No 97 Geneva 1955 p 42

*Cancer*

The increased incidence of certain forms of cancer, especially cancers of the respiratory system, has been remarkable in recent years and has given rise to much apprehension This development is most striking in countries with relatively high levels of industrialization and income A WHO study of the increase over recent years in *deaths* from cancers of the respiratory system has shown increases ranging from 21 to 50 per cent in men Among women in almost all countries mortality from cancer of the respiratory system has been found

*Table 6*

*MORTALITY FROM MALIGNANT TUMOURS*

*(Rates per 100 000 population)*

| *Country* | Years | | | | | |
|---|---|---|---|---|---|---|
| | *1950* | *1951* | *1952* | *1953* | *1954* | *1955* |
| Australia | 127 4 | 126 2 | 129 0 | 130 5 | 129 2 | |
| Canada (Excl Yukon and N W Territories) | 127 7 | 127 4 | 129 0 | 129 6 | 129 8 | 130 2 |
| Ceylon | 14 0 | 16 7 | 14 8 | 16 4 | 16 9 | 18 1 |
| Chile | 83 6 | 85 1 | 84 8 | 86 6 | 90 2 | |
| Colombia | | | | 42 1 | 38 9 | 40 7 |
| Denmark | | 177 0 | 179 4 | 185 7 | 190 0 | 190 6 |
| Egypt (Localities with health bureau) | 19 9 | 19 9 | 21 9 | 21 8 | 24 5 | |
| El Salvador | 21 4 | 23 6 | 20 2 | 19 1 | | |
| Finland | 138 4 | 142 7 | 146 0 | 148 7 | 145 3 | 145 8 |
| France | 173 1 | 176 1 | 179 6 | 179 3 | 181 9 | 183 9 |
| Germany (Federal Republic) | | | 184 6 | 183 9 | 186 5 | |
| Italy | | 114 0 | 118 4 | 121 0 | 124 1 | |
| Japan | 77 4 | 78 7 | 81 3 | 82 6 | 85 3 | 87 2 |
| Netherlands | 146 9 | 149 3 | 151 0 | 151 6 | 156 3 | 154 8 |
| New Zealand (Excl Maoris) | 147 7 | 154 9 | 149 2 | 144 8 | 146 6 | |
| Norway | | 158 4 | 157 9 | 156 8 | 159 7 | |
| Poland | 91 0 | | | 93 0 | | |
| Portugal | | | 70 6 | 71 1 | 75 3 | 84 1 |
| Spain | | 80 0 | 84 1 | 86 2 | | |
| Sweden | | 154 6 | 161.2 | 163 6 | 158 9 | |
| Switzerland | | 192 1 | 187 7 | 190 1 | 188 2 | |
| United Kingdom | | | | | | |
| England and Wales | 194 5 | 196 5 | 199 4 | 199 3 | 203 5 | 205 5 |
| Scotland | 193 8 | 192 4 | 197 8 | 197 8 | 205 0 | 206 2 |
| United States of America | 139 3 | 140 5 | 143 4 | 144 7 | 145 8 | |

to be not only much lower than among men, but also to be increasing less rapidly, so that the male female differential is growing (table 7) With improved diagnosis and treatment, some forms of cancer peculiar to women (in particular, cancer of the uterus) have been declining or stationary as causes of death in a number of countries

*Table 7*

MORTALITY FROM MALIGNANT NEOPLASMS OF THE RESPIRATORY SYSTEM

*(Rates per 100 000 persons of each sex)*[28]

| *Country* | *Sex* | *1949* | *1952* | *Increase in number of deaths per 100,000* |
|---|---|---|---|---|
| Denmark | M | 16 7 | 24 8 | 8 1 |
| | F | 4 3 | 6 5 | 2 2 |
| Finland | M | 29 8 | 38 0 (1951) | 8 2 |
| | F | 5 4 | 6 5 (1951) | 1 1 |
| France | M | 21 7 | 28 2 | 6 5 |
| | F | 5 6 | 6 1 | 0 5 |
| Ireland | M | 15 1 | 22 2 | 7 1 |
| | F | 4 5 | 7 3 | 2 8 |
| Italy | M | 11 3 | 16 4 | 5 1 |
| | F | 3 4 | 4 5 | 1 1 |
| Netherlands | M | 24 5 | 30 3 | 5 8 |
| | F | 4 4 | 4 0 | — 0 4 |
| Norway | M | 9 0 | 11 9 | 2 9 |
| | F | 3 6 | 5 4 | 1 8 |
| Switzerland | M | 26 1 | 33 5 | 7 4 |
| | F | 4 7 | 4 7 | 0 |
| United Kingdom | | | | |
| England and Wales | M | 49 5 | 61 4 | 11 9 |
| | F | 9 8 | 11 3 | 1 5 |
| Scotland | M | 41 4 | 56 3 | 14 9 |
| | F | 10 8 | 10 9 | 0 1 |
| Canada | M | 16 4 | 19 0 | 2 6 |
| | F | 4 6 | 4 0 | — 0 6 |
| United States of America | M | 21 5 | 26 1 | 4 6 |
| | F | 4 9 | 5 4 | 0 5 |
| Japan | M | 3 3 | 4 9 | 1 6 |
| | F | 1 2 | 2 2 | 1 0 |
| Australia | M | 16 7 | 20 8 | 4 1 |
| | F | 3 6 | 4 3 | 0 7 |
| New Zealand | M | 21 6 | 31 5 | 9 9 |
| | F | 3 9 | 5 1 | 1 2 |

[28] M. Pascua, "Increased Mortality from Cancer of the Respiratory System", Bulletin of the World Health Organization vol. 12, No. 5 1955

In spite of the rapid increase in cancers of the respiratory system, cancers of the digestive organs, which are increasing more slowly, still appear to take more lives than any other type of malignancy In Japan cancers of the digestive organs account for 73 6 per cent of all cancer deaths, in eighteen other countries, this percentage, while lower, still shows that more cancer patients die from cancer of the digestive organs than from any other type of cancer and often from all other types together

As in the case of mortality from cancer of the r spiratory organs, mortality from cancer of the digestiv organs is higher—in some cases, strikingly so—amor men than among women [29] Mortality from such ca cers increases from the age of forty and becomes ve important after sixty

Much study is now being devoted to the causes increased cancer mortality Improvements in diagnos methods, aging of the population, and decrease deaths from other causes undoubtedly account for mu of the rise, yet it would appear that these factors cann explain its whole extent, in particular the rapid rise male cancer of the lungs and other cancers of the respi tory system Thus, improvement in diagnostic tec niques cannot explain the more rapid rise in mortal from such cancers among males than among femal Extensive research is being conducted on the significar of the statistical correlations that have been found exist between heavy cigarette smoking and frequency cancer of the respiratory organs The possibility t exhaust fumes and other types of air pollution in urb industrial areas may contribute to the frequency respiratory cancer is also being investigated

### *Accidents*

The increasing use of machinery, and in particul the expansion of motorized traffic in many parts of world have been accompanied by constantly increasi accident rates Special attention is therefore bei given in many countries to the study of the physi and psychological problems involved in the causati of accidents

In countries covered by a recent WHO study of problem,[30] accidents of all kinds were responsible between 2 4 and almost 7 per cent of all deaths, w rates running considerably higher for men than women (See table 8)

Transport fatalities—most of them resulting fr motorcar accidents—appear to be the major form accidental deaths in these countries and are increasi in absolute figures as well as in relation to other for of accidental death In a number of countries, such Australia, Canada, Germany (Federal Republic), Ita Sweden and the United States, transport fatalities n account for one half or nearly one half of the to number of such deaths, this ratio being much hig among men than among women

Apart from transport fatalities, the major causes accidental deaths are as follows falls, which in cert countries are responsible for up to two thirds of accidental deaths, drowning, which may account for to one third, fire and explosions, which sometim cause up to one quarter, and poisoning, accounting some places for nearly one fifth of all accident victir

[29] "Mortality from Malignant Neoplasms of Digestive Org and Peritoneum", World Health Organization *Epidemiological a Vital Statistics Report* vol. 9 No 5, 1956

[30] "Mortality from Accidents", World Health Organizati *Epidemiological and Vital Statistics Report* vol. 9, No 1 1956

*Table 8*

MORTALITY FROM ACCIDENTS

| Country | Year | Rates per 100,000 population: Both sexes | M | F | Percentages of total mortality: Both sexes |
|---|---|---|---|---|---|
| Australia [a] | 1950 | 53.7 | 79.6 | 27.3 | 5.6 |
| | 1953 | 55.5 | 79.8 | 30.5 | 6.1 |
| Canada | 1950 | 55.2 | 78.6 | 31.2 | 6.1 |
| | 1953 | 58.6 | 84.4 | 32.0 | 6.8 |
| Ceylon | 1950 | 31.8 | 41.6 | 20.7 | 2.5 |
| | 1953 | 31.9 | 42.0 | 20.7 | 2.9 |
| Denmark | 1951 | 43.4 | 54.0 | 33.0 | 4.9 |
| | 1953 | 41.7 | 51.7 | 31.8 | 4.6 |
| Finland | 1952 | 44.7 | 67.2 | 24.0 | 4.7 |
| | 1953 | 49.7 | 74.6 | 26.9 | 5.2 |
| France | 1950 | 49.7 | 71.5 | 29.4 | 3.9 |
| | 1953 | 58.3 | 81.8 | 36.3 | 4.5 |
| Germany (Federal Republic) | 1952 | 48.7 | 74.6 | 25.8 | 4.6 |
| | 1953 | 53.6 | 81.9 | 28.6 | 4.9 |
| Ireland | 1950 | 27.3 | 33.1 | 21.4 | 2.2 |
| | 1953 | 28.1 | 36.6 | 19.3 | 2.4 |
| Italy | 1951 | 32.1 | 49.7 | 15.3 | 3.1 |
| | 1953 | 33.0 | 53.4 | 13.6 | 3.3 |
| Japan | 1950 | 39.5 | 58.3 | 21.4 | 3.6 |
| | 1953 | 39.3 | 58.2 | 21.2 | 4.4 |
| Netherlands | 1950 | 29.7 | 41.7 | 17.7 | 4.0 |
| | 1953 | 49.3 | 63.2 | 35.5 | 6.4 |
| New Zealand [b] | 1950 | 39.7 | 56.4 | 22.9 | 4.3 |
| | 1953 | 43.5 | 61.3 | 25.5 | 4.9 |
| Norway | 1951 | 46.3 | 65.6 | 25.7 | 5.5 |
| | 1953 | 43.6 | 61.8 | 22.9 | 5.2 |
| Sweden | 1951 | 38.6 | 53.4 | 24.0 | 3.9 |
| | 1953 | 41.4 | 59.6 | 23.4 | 4.3 |
| Switzerland | 1951 | 56.2 | 82.9 | 30.8 | 5.3 |
| | 1953 | 55.5 | 81.5 | 30.9 | 5.4 |
| United Kingdom: England and Wales | 1950 | 32.1 | 41.5 | 23.3 | 2.8 |
| | 1953 | 33.6 | 43.1 | 24.9 | 2.9 |
| Scotland | 1950 | 44.2 | 55.9 | 33.4 | 3.6 |
| | 1953 | 47.8 | 62.8 | 34.0 | 4.2 |
| N. Ireland | 1950 | 35.0 | 46.2 | 24.4 | 3.0 |
| | 1953 | 41.6 | 55.5 | 28.3 | 3.9 |
| United States of America | 1950 | 60.6 | 84.8 | 36.6 | 6.3 |
| | 1953 | 60.0 | 84.9 | 35.9 | 6.3 |

[a] Excluding the aborigines.

[b] Excluding Maoris.

In economically developed countries, mortality from accidents has now become a major cause of death among children, particularly among boys. In fact, it appears that in these countries more children now die from accidents than from all infective and parasitic diseases put together.[21] In 1954 deaths from accidents accounted for 58 per cent of *all* deaths among boys 5-19 years of age in Canada, 45 per cent in the Netherlands, and 38 per cent in England and Wales. Next to transport fatalities, drowning tends to account for the largest number of accidental deaths among children, particularly in the younger age groups (in the Netherlands drowning accounts for more deaths in the 1-5 year age-group than do transport fatalities). In Finland more than half of the accidental deaths other than transport fatalities are caused by drowning; in Iceland, however, where swimming lessons are compulsory, drownings have been decreasing as a cause of death. Among infants up to one year, suffocation is the most common cause of accidental death in the countries under consideration.

### *Male-female differences in mortality trends*

It will be noted from the above discussion that in the case of the degenerative diseases that are increasing as causes of death ... social

[21] *Ibid.*, p. 123

—especially heart diseases and cancers of the respiratory organs and the digestive system—the male rates have, as a rule, risen to significantly higher levels than have the female rates. The same is true of deaths from accidents. One result is that the female life expectancy has lengthened more than that of the males in these countries.

A considerable sex differential is also found in certain other diseases that are believed to be more common in highly urbanized and industrialized societies than elsewhere. This includes ulcers of the stomach and duodenum, which are generally not, however, major causes of death and for which the mortality rates have not been increasing during the period under review.[32]

A similar picture of sex differences holds in regard to suicide rates, which would also appear to be higher in the more urbanized and industrialized countries.[33]

### B. Health promotion and protection

Progress in health is not to be judged merely by the reduction of mortality rates or the control or prevention of specified diseases. Good health is a positive concept which involves general protection of the individual against sickness and the promotion of a general state of well being. This is recognized in the growing emphasis that is being given by national health administrations to the healthy development of children, the health education and health consciousness of the public, to mental health and to environmental sanitation. The recent development in the use of atomic energy has also brought to attention the health problems involved and the need for protective measures against exposure to excessive radiation.

A balanced picture of the world health situation must, therefore, take into account those aspects that relate to the promotion and protection of the health of populations. There are, however, extremely few statistics of a reliable and comparable nature bearing on such matters. Perhaps the salient fact to be recorded is the growing recognition of their importance.[34]

It does appear, however, from scattered data on infant mortality and from other sources, that the state of health of children in many parts of the world has been improving, partly as a result of the attention given to maternal care and child health services; efforts have been made in many countries to extend these services to rural areas and to link the preventive and curative aspects. Nevertheless, children in many countries sti[ll] suffer from under-nutrition (which may have seriou[s] implications for subsequent adult health), and this i[s] frequently aggravated by heavy helminthic infestation[s]. The diet of children in most of the under-develope[d] areas is deficient in animal protein. Skimmed mil[k] powder is at present being widely distributed and use[d] for feeding the weaned child, or in school feeding sch[e]mes, but a lasting solution to the problem of chi[ld] malnutrition is still being sought. Research into th[e] ways and means of using locally available sources [of] protein for child feeding is being carried out in Afric[a], Central America and India.

#### *Mental health*

The need to safeguard mental health has becom[e] obvious in countries where mental health disorde[rs] constitute a serious public health problem—leading, [in] some of the more developed countries, to the occupan[cy] of approximately one half of the existing hospital be[ds] by the mentally ill. Such figures do not refer to th[e] patients treated in general hospitals whose diseases a[re] wholly or partly of psychological origin.

The reasons for this situation are complex. On th[e] one hand, where people are living longer, problems [of] old age increase, and more cases of mental disorder[s] such as the arteriosclerotic or senile psychoses, occ[ur] and require special care. Psychoses due to such caus[es] accounted for about 40 per cent of the first admissio[ns] to New York State mental hospitals in 1953 and 195[4]. On the other hand, it is also believed that psychologic[al] stress or conflict in connexion with changing soci[al] conditions may cause psychoneurotic and psychosom[a]tic diseases and other mental health problems, includi[ng] those associated with juvenile delinquency. Finall[y], there is good reason to believe that the number [of] patients who seek help in the mental field has a tenden[cy] to increase as soon as attention is called to the fact th[at] adequate medical care is available for them.

The assessment of mental health conditions is, how[ev]er, complicated by the fact that few countries hav[e] reliable statistics on the subject, and even within [a] given country, concepts and definitions may vary widel[y]. The extent to which existing mental disorders receiv[e] professional treatment or result in hospitalization ma[y] also vary widely. In Japan, according to a recent su[r]vey, less than 10 per cent of all the cases of menta[l] disorder found in a given region received some form o[f] care by physicians or psychiatrists—90 per cent had n[o] professional guidance at all. Statistics on, say, hospita[l] admissions for mental illness—which are sometime[s] used as an indication of rates of mental illness—ar[e] usually not comparable from country to country, and particularly cannot be used to compare industrialized and non-industrialized countries. Thus, while it is commonly believed that different types of society and culture produce differing amounts of mental illness (as

[32] See "Deaths from Ulcers of Stomach and of the Duodenum in Selected Countries", World Health Organization *Epidemiological and Vital Statistics Report*, vol. 8, No. 9, 1955, pp. 361-3[illegible]5. S[illegible] or declining mortality trends do not, of course, imply that morbidity trends may not have been rising.

[33] See "Mortality from Suicide," World Health Organization *Epidemiological and Vital Statistics Report*, Vol. 9, No. 4, 1956. It should be noted that there are very few data for less developed countries, that the reliability and comparability of suicide rates are open to considerable question, that some of the more developed countries have rates quite as low as under-developed countries, and that, in general, published suicide rates have not shown any broad upward tendency in the more developed countries during the last fifty years or so in spite of rapid urbanization and industrialization during that period.

[34] Relevant programmes have been treated in some detail in the *International Survey of Programmes of Social Development*, op. cit.

well as differing forms), there is insufficient statistical information to permit firm conclusions on this subject at present.

Studies in mental health have shown that the causes of mental derangement often occur in infancy or early childhood and that the normal development of the child in relation to his parents, family, or society is of vital importance. Increasing attention is, therefore, being given to mental health activities in all health services—especially maternal and child health services—and to the adoption of preventive measures.

In the field of therapy, greater attention is now being given to the need for treating patients with a view towards their maintaining, or at least recuperating at an early date, their integration with society. More and more use is therefore made of out patient departments and of day hospitals, particularly in the United Kingdom, Canada and the United States, while in ordinary hospital work the need for creating a therapeutic community is being stressed. In this context mention should also be made of the increasing interest in the use of group psychotherapeutic techniques. As to drug therapy, there has been a very important development in recent years, consisting of the introduction of substances such as chlorpromazine and reserpine which have a "tranquillizing" effect upon the nervous system. By controlled use of these drugs, it has been possible to improve the psychotherapeutic and sociotherapeutic accessibility of mental patients and thereby to cut down the average length of hospitalization in many establishments.

### *Environmental sanitation, and environmental hazards from industrial development*

In the economically less developed countries, the major problems of environmental sanitation relate to the transmission of disease, and the principal efforts during the period under review have been directed toward the improvement of water supply and excreta disposal and the control of insects. Particular attention has been given by many countries to the adequate provision of water to the rural population.

In the more industrially advanced countries, improved environmental sanitation has greatly reduced the transmission of disease. The activities of health departments include continuing supervision of water supplies, sewage collection and disposal, and food hygiene programmes. In addition to such continuing action against the dangers of biological contamination or pollution, however, the health authorities in these countries must also deal with dangers from the presence in the environment of certain chemical or physical substances or processes.

While industrialization has helped provide the technical means and material resources for considerable advances in health, it has also brought new hazards to health. Reference has already been made to the increases in accidents directly associated with expansion of motor transport, as well as to increases in degenerative diseases which may be to some extent associated with certain modes of living and habits of consumption in a high-income industrialized society. The toxic effects of insecticides (traces of which remain on food that reaches the table), of certain food additives and other chemical products ingested into the body[35] are further examples of dangers that may accompany technological advancement. So also are certain hazards to health deriving from environmental contamination.

Countries now highly industrialized, or undergoing extensive industrialization, are faced with new factors which already exercise a detrimental effect on sanitary conditions, even in areas considered to have achieved high standards of sanitation. Pollution of waters by industrial wastes is one important new factor. Toxic wastes from several types of industry, particularly such metal-processing wastes as cyanide and chromium, make water totally unfit for human consumption; organic wastes from such industries as pulp and paper mills or food processing plants, although not specifically toxic, by fouling streams make water so unpalatable as to be unsuitable for water supply; acid wastes from mining operations or from other industrial processes render the water so corrosive and so difficult to purify that its value for general purposes is greatly reduced. Pollution by industrial wastes may affect the recreational use of interior and coastal waters; it may exterminate fish and shell fish and thus affect food and nutrition, and it may also render water unusable for agricultural purposes. Air pollution attributable to industrial gases, fumes and smoke, including exhaust gases from internal combustion engines, has already become a serious matter in many industrial areas. The notorious "smogs" of London, Los Angeles and the Ruhr are good examples of this hazard.

Aside from these specific conditions, industrialization, when associated with over-rapid urbanization, may lead to a number of other problems in community sanitation. Among them are problems associated with deterioration of housing, over-taxing of water and sewerage systems, and the breakdown of services relating to public cleansing, food and restaurant sanitation.

### *Radiation*[36]

Atomic radiation presents a health problem that is associated with some of the most important of modern scientific and technological developments. It is a problem that has come to public attention particularly in connexion with the testing of atomic and thermonuclear bombs and the industrial use of atomic energy, but recent-

[35] World Health Organization, *Joint FAO/WHO Expert Committee on Nutrition*, Fourth Report, WHO Technical Report Series No. 97, Geneva, 1955.

[36] Many of the statements contained in this section are drawn

ly interest has been directed to the total picture of the radiation received by populations in a modern technological society

Humanity has always been exposed to a certain amount of atomic radiation, coming from cosmic sources and from the naturally radioactive elements (uranium, radium, potassium 40, carbon 14, etc ) that are found locally in the earth or are incorporated in the body It has been estimated that the background gamma radiations from the earth usually produce about 45 per cent of the total of natural irradiation, cosmic rays (at sea level) about 30 per cent, and potassium 40 in the body about 20 per cent[37] The amount of radiation from natural sources is variable, because radioactive minerals are not equally distributed throughout the inhabited world, and because the intensity with which cosmic rays hit the earth at any point of its surface depends on several factors, including altitude

Artificial irradiation is derived from [38]

(1) The contamination of the environment, the atmosphere, or water by radioactive waste from atomic industries or from users of radioelements,

(2) The radioactive fallout, at greater or lesser distances from the source, or radioactivity resulting from the explosion of nuclear devices,

(3) The occupational exposure of certain groups of workers medical practitioners, radiologists, dentists, nurses, atomic energy workers, uranium or thorium miners, and the industrial or scientific users of radiation generators or radioactive isotopes,

(4) The medical use of X-rays, other ionizing radiations and radioelements in the detection, diagnosis, investigation and treatment of human diseases,

(5) The use of certain devices which emit radiation, such as television receivers, watches with luminous dials, and the X ray generators used for the purpose of fitting shoes

The amount of artificial radiation must vary considerably in different countries, and there is inadequate information as to the over-all significance of these factors In certain countries where estimates have been made, it appears that the greatest gonad irradiation of the population is due to diagnostic radiological procedures, the amount from this source about equalling that from all natural sources in certain instances The total present contribution from occupational exposure, from the products of atomic industries, from radiotherapy and from the miscellaneous radiating devices mentioned above is likely to be very considerably smaller That from radioactive fallout appears at present to be in the region of 1 per cent of the natural gonad irradiation in most areas [39]

Radiation may have effects on the individual, or through him on his descendants The former effects, called " somatic ", occur primarily in those individuals who are themselves exposed to occupational or other hazards, or to accidents These include such effects as chronic or acute injuries to the hands suffered by radiologists, bone conditions sometimes leading to cancer in radium workers, forms of anaemia, such as leukaemia and aplastic anaemia, and a variety of other effects

The health problem associated with the genetic effects of radiation is quite different in nature from the problem of direct bodily injury When radiation affects the germinal tissues of the reproductive organs of a wide range of organisms from lower creatures to mammals, it has been shown to produce mutations in their offspring, although these effects may not appear under natural conditions of breeding for very many generations It should be stressed that mutations of a similar kind occur spontaneously, and one is not dealing with a mysterious injury of an entirely new type radiation may merely influence the rate of production of such alterations in heredity The great majority of mutations from both sources are thought to be harmful and also ' genetic effects of radiation are characterized by the fact that no threshold is known or substantially suspected to exist [40] Moreover, the genetic damage done by radiation is thought to be irreversible and cumulative In other words, what counts from the point of view of genetic change is not the amount of radiation received by one person's germinal tissues at a particular time, but the total accumulated dose of radiation to all members of the population from the beginning of each individual's life to the time that the offspring are conceived No precise correlation between the amount of accumulated radiation and the genetic effect has been calculated, but available scientific information leads to the conclusion that the greater the total dose of radiation received, the greater the likelihood of genetic defects in the total offspring over many generations All sources of radiation, natural and artificial, contribute to this total

Because of the complex character of radiation hazards and the length of time needed to observe their effects on individual human beings and on populations, relevant factual information is at the present time quite inadequate Vast quantities of data are needed before final conclusions can be reached as to the levels of radiation danger, both somatic and genetic

### *Provision of health services*

As the concept of health has undergone considerable evolutionary change during recent years, the scope of

[37] *The Responsibilities of the Medical Profession in the Use of X-Rays and Other Ionizing Radiation* forthcoming Statement by the United Nations Scientific Committee on the Effects of Atomic Radiation

[38] The following information on the sources and amounts of artificial irradiation is taken from the Statement of the United Nations Scientific Committee on the Effects of Atomic Radiation, cited above.

[39] According to the reports sent to the United Nations Scientific Committee on the Effects of Atomic Radiation by the United Kingdom and the United States of America.

[40] Austin M Brues, " Commentary on the Modes of Radiation Injury " in *Peaceful Uses of Atomic Energy—Proceedings of the International Conference in Geneva, August 1955*, Vol 11 (New York, 1956), p 73

health services has been greatly broadened[41] Many countries are now undertaking to provide a more comprehensive health service, and to make the service available, as far as possible, to all sections of the population Perhaps the most important and significant recent feature in the provision of health services is the development of local health units through a system of decentralized integrated health services This involves the creation of local health units in which both curative and preventive services are provided by teams of medical and health auxiliary workers (medical assistants sanitary overseers, dispensers, nurses, midwives, etc ) under the direction of physicians or medical officers[42] In an increasing number of countries, such units are being integrated into decentralized national systems of health protection, and in some cases they are also co ordinated with over all economic and social development programmes They are particularly important in the rural areas of the less developed countries, where they are beginning to compensate for the concentration of health facilities in the cities

To the extent that a general promotion of health is indicated by the improvement in health services and facilities, such recent developments in the establishment of local health centres, clinics, dispensaries, etc , should be taken into account

Available statistics bearing on the extent of health services are largely limited, however, to numbers of hospital beds The demands for hospital beds are increasing in many countries, and the provision for hospital service is, as a rule, taking priority over that of an integrated local health service According to the information made available by Governments the increase in hospital beds in a great number of countries has been considerable during the past few years (table 9) In considering the need for hospital beds in a country, the mere ratio of inhabitants per hospital bed is not adequate to indicate the extent of fulfilment of such a need without further analysis of the distribution and use of the hospital service in connexion with the total health service and the requirements of the country Hospitals are often concentrated in large cities and inaccessible to many of the inhabitants of the hinterland Experts have considered that the number of hospital beds in relation to population has only a potential significance as regards 'treatments given to the population[43] and it cannot be considered as fully representing a decisive factor for determining health levels[44]

[41] See the discussion of health services in the *International Survey of Programmes of Social Development* pp 11 17

[42] In the Soviet Union for example a widely distributed network of health establishments provides both curative and preventive services for the rural population Every rural district varying from 50 000 to 100 000 population has one district hospital with about 100 to 150 beds two to five rural medical centres and a number of health stations nursing homes and temporary or permanent nurseries

[43] *Report of the Study Group on the Measurement of Levels of Health* op cit

[44] *Expert Committee on Health Statistics* Fourth Report, op cit p 22.

*Table 9*

HOSPITAL BEDS[a]

| Country | Date | Inhabitants per hospital bed | Country | Date | Inhabitants per hospital bed |
|---|---|---|---|---|---|
| *Africa* | | | Reunion | 1949 | 280 |
| | | | | 1952 | 220 |
| Basutoland | 1948 | 1 300 | Rhodesia (Northern) | 1948 | 630 |
| | 1952 | 540 | | 1952 | 490 |
| Belgian Congo | 1950 | 450 | Rhodesia (Southern) | 1948 | 620 |
| | 1952 | 222 | | 1952 | 205 |
| French Equat Africa | 1950 | 360 | Ruanda Urundi | 1950 | 1 660 |
| | 1952 | 340 | | 1953 | 910 |
| French West Africa | 1950 | 700 | Sierra Leone | 1948 | 2 000 |
| | 1952 | 700 | | 1952 | 1 550 |
| Gold Coast[b] | 1948 | 1 900 | Tanganyika | 1950 | 940 |
| | 1952 | 1 100 | | 1952 | 530 |
| Kenya | 1948 | 1 000 | Uganda | 1948 | 1 500 |
| | 1952 | 740 | | 1952 | 870 |
| Liberia | 1950 | 7 000 | Union of South Africa | 1948 | 300 |
| | 1952 | 4 000 | | 1951 | 175 |
| Madagascar | 1950 | 320 | Zanzibar | 1948 | 400 |
| | 1952 | 280 | | 1952 | 340 |
| Mauritius | 1949 | 210 | | | |
| | 1952 | 135 | *Asia and the Far East* | | |
| Nigeria | 1948 | 3 500 | | | |
| | 1952 | 2 200 | Afghanistan | 1950 | 1 200 |
| Nyasaland | 1948 | 680 | Burma | 1952 | 10 800 |
| | 1952 | 700 | Cambodia | 1952 | 2,800 |

*Table 9* (continued)

| Country | Date | Inhabitants per hospital bed |
|---|---|---|
| Ceylon | 1951 | 435 |
| | 1953 | 360 |
| Hong Kong | 1950 | 605 |
| | 1953 | 500 |
| India | 1949 | 3 060 |
| | 1950 | 3,060 |
| Indonesia | 1948 | 2 100 |
| | 1954 | 1,300 |
| Japan | 1950 | 300 |
| | 1952 | 196 |
| Laos | 1951 | 500 • |
| Malaya (Federation) | 1950 | 200 |
| | 1952 | 205 |
| North Borneo • | 1948 | 550 |
| | 1952 | 440 |
| Philippines • | 1948 | |
| | 1951 | |
| Singapore | 1950 | 250 |
| | 1952 | 205 |
| Thailand | 1954 | 1,580 |
| Viet Nam | 1950 | 3,000 • |
| | 1952 | 2,500 • |
| *Middle East and Northern Africa* | | |
| Algeria | 1949 | 360 |
| | 1953 | 345 |
| Cyprus | 1948 | 380 |
| | 1952 | 290 |
| Egypt | 1953 | 600 |
| Ethiopia | 1950 | 4,900 |
| | 1953 | 3,500 |
| Iran | 1952 | 2 300 |
| Iraq | 1948 | 925 |
| | 1952 | 870 |
| Israel | 1950 | 200 |
| | 1952 | 155 |
| Jordan | 1951 | 735 |
| Lebanon | 1952 | 155 |
| Morocco (Northern Zone) | 1952 | 780 |
| Sudan | 1949 | 1,150 |
| | 1952 | 1 100 |
| Syria | 1951 | 1,370 |
| Tunisia | 1951 | 600 |
| Turkey | 1950 | 1 115 |
| | 1952 | 950 |
| *Latin America and Caribbean Area* | | |
| Argentina | 1948 | 250 |
| | 1951 | 160 |
| Bahamas | 1948 | 215 |
| | 1952 | 160 |
| Barbados | 1948 | 192 |
| | 1953 | 182 |
| Bermudas | 1952 | 155 |
| Bolivia | 1948 | 565 |
| | 1953 | 480 |
| Brazil | 1950 | 320 |
| | 1951 | 310 |
| British Guiana | 1948 | 105 |
| | 1952 | 95 |
| British Honduras | 1948 | 350 |
| | 1951 | 180 |
| Chile | 1951 | 185 |
| Colombia | 1952 | 380 |
| Costa Rica | 1951 | 200 |
| | 1953 | 135 |
| Cuba | 1948 | 300 |
| Dominican Republic | 1951 | 390 |
| El Salvador | 1949 | 480 |
| Guadeloupe | 1949 | 145 |
| | 1952 | 125 |
| Guatemala | 1952 | 660 |
| Haiti | 1951 | 1 500 |
| Honduras | 1948 | 750 |
| Jamaica | 1948 | 225 |
| | 1952 | 235 |
| Martinique | 1952 | 110 |
| Mexico | 1953 | 875 |
| Netherlands Antilles | 1948 | 120 |
| | 1953 | 130 |
| Nicaragua | 1952 | 510 |
| Panama | 1948 | 245 |
| | 1950 | 245 |
| Paraguay | 1946 | 615 |
| Peru | 1947 | 495 |
| | 1952 | 500 |
| Puerto Rico | 1950 | 300 |
| | 1952 | 220 |
| Surinam | 1950 | 100 |
| | 1952 | 85 |
| Trinidad | 1948 | 225 |
| | 1952 | 165 |
| Uruguay | 1950 | 175 |
| Venezuela | 1950 | 290 |
| | 1953 | 395 |
| *Europe* | | |
| Albania | 1953 | 360 |
| Austria | 1948 | 130 |
| | 1953 | 105 |
| Belgium | 1951 | 105 |
| Bulgaria | 1954 | 260 |
| Czechoslovakia | 1954 | 104 |
| Denmark | 1949 | 103 |
| | 1951 | 98 |
| Finland | 1951 | 140 |
| France | 1952 | 65 |
| Germany (Fed Rep) | 1952 | 95 |
| Greece | 1951 | 365 |
| Hungary | 1954 | 160 |
| Iceland | 1946 | 110 |
| | 1950 | 100 |
| Ireland | 1952 | 67 |
| Italy | 1951 | 165 |
| Luxembourg | 1952 | 108 |
| Malta | 1952 | 100 |
| Netherlands | 1950 | 185 |
| Norway | 1949 | 200 |
| | 1951 | 190 |
| Poland | 1947 | 235 |
| | 1954 | 205 |
| Portugal | 1950 | 270 |
| | 1952 | 225 |
| Romania | 1954 | 225 |

*Table 9* (continued)

| Country | Date | Inhabitants per hospital bed | Country | Date | Inhabitants per hospital bed |
|---|---|---|---|---|---|
| Spain | 1949 | 205 | Yugoslavia | 1950 | 305 |
| Sweden | 1950 | 88 | | 1952 | 310 |
| | 1952 | 70 | | | |
| Switzerland | 1947 | 67 | *Northern America and Oceania* | | |
| | 1950 | 68 | | | |
| United Kingdom | | | Canada | 1949 | 94 |
| England and Wales | 1952 | 85 | | 1953 | 77 |
| Scotland | 1950 | 98 | United States of America | 1950 | 104 |
| | 1953 | 83 | | 1953 | 101 |
| Northern Ireland | 1952 | 92 | Australia | 1952 | 90 |
| USSR • | 1950 | 200 | New Zealand | 1950 | 114 |
| | 1955 | *155* | | 1953 | 76 |

• *Source* World Health Organization Medical Statistics Ratio of population to hospital beds calculated by United Nations Secretariat

• Including Togo (*UK* Trust Territory)

• Estimate

• Including Brunei and Sarawak.

• Incomplete data

• Derived from Central Statistical Office of Poland, *Statistical Yearbook 1955* p 261 data refer to end of year

• Derived from Central Statistical Administration of the USSR, *Narodnoe Khozyaistvo SSSR*, p 246

*Availability of trained health personnel*

In many countries, the provision of health services is limited by a shortage of health personnel During recent years both medical educators and public health administrators have been aware of this problem and have pointed out the need for close and frequent consultations between the teaching institutions in the medical and allied fields and the health authorities in order to secure effective co-ordination of teaching schedules as well as the supply of different types of personnel to meet the needs of health services [45]

This involves both qualitative and quantitative adjustments in the education and training of health personnel

[45] World Health Organization Technical Report Series No 55 p 17

[46] World Health Organization Technical Report Series No 69 pp 4-5

The aim of medical education to prepare physicians of the future has been set [46] and the team concept of health workers has been defined [47] These changes are particularly important today when the social legislator looks more and more to the medical scientist for advice on how best to apply knowledge in medical sciences for the well being of the community as a whole

In a number of countries, opportunities have been provided for the study of " social or comprehensive " medicine, by the creation of Chairs or Departments of Social Medicine in universities or schools of public health, and the teaching of preventive and social medicine in undergraduate medical education has been intensified Recent alterations in the teaching of medical students have taken the form of revision of the preclinical courses to allow an earlier introduction of the student to the patient in his family environment—the

[47] WHO/Educ/44

*Table 10*

POPULATIONS, MEDICAL SCHOOLS AND PHYSICIANS BY CONTINENTAL AREAS-SUMMARY TABLE

| Area | Population | No of medical schools | Population per medical school | Number of physicians | Population per physician | Annual number of medical graduates |
|---|---|---|---|---|---|---|
| Africa | 210 832 000 | 16 | 13 177 000 | 23 284 | 9 055 | 1 089 |
| North America | 234 276 000 | 124 | 1 889 000 | 259 664 | 902 | 9 076 |
| South America | 121 000 000 | 53 | 2,283 000 | 48,263 | 2,507 | 5 308 |
| Asia Eastern | 1 370 821 000 | 171 | 8 016 497 | 209 688 | 6 537 | 12,418 |
| Asia Western | 84 214 000 | 15 | 5 614 000 | 16 991 | 4 956 | 868 |
| Europe | 619 707 000 | 253 | 2 449 000 | 665 522 | 931 | 37,222 |
| Oceania | 14 234 000 | 6 | 2,372 000 | 12 427 | 1,145 | 741 |
| WORLD TOTAL | 2 655 084 000 | 638 | 4 162 000 | 1,235 839 | 2 148 | 66 722 |

allocation of a student to a family which he follows under guidance for a certain period The psychological aspects of medical care are, rather belatedly, being given increased attention in some of the more advanced medical schools

The quantitative aspects of the supply of physicians have been the subject of a recent study [48] Table 10 summarizes on a regional basis the detailed country figures—some of which are estimates and assumptions As in the case of the index of hospital beds, " the population per physician " ratio is considered to have limited significance because of difficulties in ascertaining the distribution and utilization of this service. The gross *insufficiency of physicians is, however, quite evident in* the less developed areas, where, in some cases, there is only one physician for every 50,000 or more inhabitants, as compared with one doctor for about every 900 inhabitants in the more highly developed countries In the great majority of the countries for which data are available, there has been some improvement in the ratio during the period under review (table 11).

The question of the availability of medical personnel concerns not only physicians, but also a variety of auxiliary personnel. The Governments of a number of countries, in addition to planning and re-adjusting full professional education for medical and allied personnel, have made use of the team concept of health workers by training and utilizing auxiliary medical and health workers to solve the problem of shortage of fully qualified medical personnel In South East Asian and African countries and territories, " medical assistants " or " health assistants " have been widely used to carry out some *of the functions of fully qualified doctors*

[illegible] countries to extend health services to larger sections of their populations Health progress indicated in the reduction of mortality rates, including infant mortality rates for specific regions or localities, no doubt reflects to an important degree this extension of services, particularly to rural areas

[48] [illegible]

*Table 11*

PHYSICIANS BY COUNTRY [a]

| *Country* | *Date* | *Inhabitants per physician* |
|---|---|---|
| *Africa south of the Sahara* | | |
| Angola | 1950 | 29,000 |
| | 1954 | 27,000 |
| Basutoland | 1948 | 27,000 |
| | 1954 | 21,000 |
| Belgian Congo | 1950 | 24,000 |
| | 1954 | 20,000 |
| Cameroons (French Trust Territ ) | 1950 | 25,000 |
| | 1954 | 20,000 |
| French Equat Africa | 1950 | 30 000 [b] |
| | 1954 | 23,000 [b] |
| French West Africa | 1950 | 40 000 |
| | 1954 | 28,000 |
| Gold Coast [c] | 1948 | 31,000 |
| | 1954 | 18,000 |
| Kenya | 1948 | 19,000 |
| | 1954 | 9,700 |
| Liberia | 1950 | 90,000 |
| | 1952 | 30,000 |
| Madagascar [d] | 1949 | 7,600 |
| | 1954 | 8,700 |
| Mauritius | 1949 | 5,400 |
| | 1954 | 5,900 |
| Mozambique | 1950 | 37,000 |
| | 1954 | 36,000 |
| Nigeria | 1948 | 80,000 |
| | 1954 | 57,000 |
| Nyasaland | 1948 | 24,000 |
| | 1954 | 32,000 |
| Rhodesia (Northern) | 1948 | 15,000 |
| | 1954 | 11,000 |
| Rhodesia (Southern) | 1948 | 5,200 |
| | 1954 | 4,100 |
| Reunion | 1948 | 20,000 |
| | 1953 | 5,300 |
| Ruanda-Urundi | 1950 | 72,000 |
| | 1954 | 67,000 |
| Sierra-Leone | 1948 | 38,000 |
| | 1953 | 33,000 |
| Tanganyika | 1950 | 26,000 |
| | 1954 | 20,000 |
| Togo (French Trust Territ ) | 1950 | 36,000 |
| | 1954 | 28,000 |
| Uganda | 1948 | 23,500 |
| | 1954 | 21,000 |
| Union of South Africa | 1950 | 2,200 |
| | 1954 | 2,000 |
| Zanzibar | 1948 | 4,600 |
| | 1953 | 6,200 |
| *Asia and the Far East* | | |
| Afghanistan | 1954 | 90,000 [e] |
| | 1955 | 70,000 [e] |
| Burma | 1952 | 8,400 |
| Cambodia | 1950 | |
| | 1953 | 90,000 |
| Ceylon | 1951 | 5,900 |
| | 1953 | 5,300 |
| China [f] | 1953 | 22,000 [e] |
| Hong Kong | 1950 | 4,400 |
| | 1955 | 3,300 |
| India | 1949 | 6,250 |
| | 1952 | 5,700 |

*Table 11* (continued)

| Country | Date | Inhabitants per physician |
|---|---|---|
| Indonesia | 1948 | 67 000 |
| | 1954 | 71 000 |
| Japan | 1950 | 1 200 |
| | 1954 | 1 000 |
| Korea [a] | 1952 | 5 900 |
| | 1953 | 5 700 |
| Laos | 1950 | 50 000 |
| | 1953 | 29 000 |
| Macau | 1949 | 16 500 |
| | 1952 | 2 800 |
| Malaya (Federation of) | 1948 | 7 300 |
| | 1954 | 8 000 |
| Netherlands New Guinea | 1952 | 21 000 |
| | 1954 | 14 000 |
| North Borneo [b] | 1948 | 20 000 |
| | 1955 | 16 700 |
| Pakistan | 1948 | 33,000 |
| | 1954 | 13,000 |
| Philippines | 1951 | 12 000 |
| Singapore | 1950 | 4 700 |
| | 1954 | 2,600 |
| Thailand | 1954 | 6 800 |
| Viet Nam | 1950 | 60 000 |
| | 1952 | 61 000 |
| *Middle East and Northern Africa* | | |
| Algeria | 1950 | 5 200 [b] |
| | 1955 | 5 000 [b] |
| Cyprus | 1948 | 1 300 |
| | 1954 | 1 500 |
| Egypt | 1947 | 4 300 |
| | 1954 | 3 500 |
| Ethiopia (Empire of) | | |
| Eritrea | 1954 | 18 000 |
| Ethiopia | 1953 | 210 000 |
| Iran | 1952 | 8 600 |
| Iraq | 1948 | 5 900 |
| | 1954 | 5 900 |
| Israel | 1950 | 410 |
| | 1954 | 400 |
| Jordan | 1950 | 6,800 |
| | 1955 | 6,800 |
| Lebanon | 1951 | 1 200 |
| | 1954 | 1 200 |
| Morocco | | |
| Northern Zone | 1950 | 6 000 |
| Southern Zone | 1955 | 8 900 |
| Tangier | 1952 | 2 500 [c] |
| Somaliland (Italian Trust Territory) | 1951 | 27 000 |
| | 1953 | 19 000 |
| Sudan | 1955 | 81 000 |
| Syria | 1951 | 5 000 |
| | 1954 | 4 000 |
| Tunisia | 1950 | 6 600 |
| | 1955 | 6 600 |
| Turkey | 1951 | 3 300 |
| | 1955 | 3 400 |
| *Latin American and Caribbean Area* | | |
| Argentina | 1954 | 780 |
| Bahamas | 1948 | 3 450 |
| | 1954 | 3 200 |
| Barbados | 1948 | 4 190 |
| | 1954 | 4 000 |
| Bermuda | 1953 | 1 100 |
| Bolivia | 1948 | 4 700 |
| | 1954 | 3 980 |
| Brazil | 1950 | 3 300 |
| British Guiana | 1948 | 4 400 |
| | 1954 | 2 700 |
| British Honduras | 1948 | 4 200 |
| | 1954 | 4 300 |
| Chile | 1949 | 1 800 |
| | 1953 | 1 800 |
| Colombia | 1948 | 3 300 |
| | 1952 | 2 800 |
| Costa Rica | 1951 | 3 210 |
| | 1953 | 2,800 |
| Cuba | 1952 | 1 040 |
| Dominican Republic | 1954 | 5 000 |
| Ecuador | 1946 | 3 500 |
| | 1953 | 3 700 |
| El Salvador | 1951 | 5 100 |
| | 1952 | 6 000 |
| Guadeloupe | 1949 | 3 000 |
| | 1953 | 3 300 |
| Guatemala | 1952 | 5 800 |
| Haiti | 1951 | 10 800 |
| Honduras | 1952 | 6 500 |
| Jamaica | 1948 | 6 010 |
| | 1954 | 3 700 |
| Martinique | 1946 | |
| | 1953 | 3 460 |
| Mexico | 1953 | 2,400 |
| Netherlands Antilles | 1948 | 1 800 |
| | 1953 | 1 500 |
| Nicaragua | 1950 | 3 610 |
| | 1955 | 2,600 |
| Panama | 1947/8 | 3 100 |
| | 1950 | 3 300 |
| Paraguay | 1950 | 2,500 |
| | 1954 | 2 200 |
| Peru | 1945 | 5 700 |
| | 1952 | 4 500 |
| Puerto Rico | 1950 | 3 290 |
| | 1955 | 1 600 |
| Surinam | 1950 | 2 500 |
| | 1953 | 2,400 |
| Trinidad | 1948 | 4 195 |
| | 1954 | 2 800 |
| Uruguay | 1952 | 1 130 |
| Venezuela | 1950 | 2 300 |
| | 1953 | 1 900 |
| Virgin Islands (U.S.) | 1950 | 2 200 |
| | 1953 | 1 900 |
| *Europe* | | |
| Austria | 1950 | 650 |
| | 1954 | 630 |
| Belgium | 1950 | 1 055 |
| | 1954 | 950 |
| Bulgaria | 1951 | 4 000 |
| Czechoslovakia | 1954 | 740 [d] |
| Denmark | 1949 | 980 |
| | 1955 | 910 |

*Table 11* (Continued)

| Country | Date | Inhabitants per physician |
|---|---|---|
| Finland | 1950 | 2,040 |
| | 1954 | 1,800 |
| France | 1951 | 1,200 |
| | 1954 | 1,100 |
| Germany (Federal Republic) | 1951 | 800 |
| | 1954 | 740 |
| Greece | 1951 | 1,000 |
| | 1955 | 920 |
| Hungary | 1946 | 920 |
| | 1955 | 690 |
| Iceland | 1946 | 815 |
| | 1953 | 770 |
| Ireland | 1946 | 1,100 |
| | 1951 | 1,000 |
| Italy | 1951 | 800 |
| Luxembourg | 1951 | 1,200 |
| | 1954 | 1,080 |
| Malta | 1950 | 1,120 |
| | 1954 | 1,100 |
| Netherlands | 1949 | 1,200 [e] |
| | 1955 | 1,000 |
| Norway | 1949 | 1,000 |
| | 1952 | 920 |
| Poland | 1947 | 3,100 |
| | 1954 | 1,700 |
| Portugal | 1950 | 1,500 |
| | 1954 | 1,400 |
| Spain | 1951 | 990 |
| | 1953 | 980 |
| Sweden | 1950 | 1,455 |
| | 1954 | 1,300 |
| Switzerland | 1951 | 1,020 |
| | 1955 | 700 |
| United Kingdom | | |
| England and Wales | 1951 | 1,200 [j] |
| Scotland | 1950 | 1,140 [k] |
| | 1954 | 950 [k] |
| USSR | 1950 | 680 [l] |
| | 1955 | 600 [l] |
| Yugoslavia | 1950 | 3,200 |
| | 1953 | 2,600 |
| *Northern America and Oceania* | | |
| Canada | 1948 | 967 |
| | 1954 | 950 |
| United States of America | 1950 | 754 |
| | 1953 | 760 |
| Australia | 1952 | 1,040 |
| New Zealand | 1950 | 795 |
| | 1954 | 720 |
| Papua | 1948 | 60,000 |
| | 1955 | 17,000 |
| W Samoa | 1949 | 2,780 |
| | 1955 | 2,300 |

[a] *Sources* World Health Organization, Medical Statistics Series, and United Nations *Statistical Yearbook 1956* Ratios between population and physicians, calculated by United Nations Secretariat

[b] Including military physicians

[c] Including Togo (United Kingdom Trust Territory)

[d] Including Comoro Islands

[e] Estimate

[f] Chinese People's Republic

[g] Republic of Korea

[h] Including Brunei and Sarawak

[i] Including dentists with medical degrees

[j] Estimates based on census

[k] *National Health Service Physicians*

[l] Derived from Central Statistical Administration of the USSR, *Narodnoe Khozyaistvo SSSR*, p 245

Chapter IV

# FOOD AND NUTRITION

## Introduction

Two main features characterize developments in the food situation in the last few years[1] On the hand there has been an impressive increase in food in nearly all regions of the world Not only e the serious food shortages of early post-war years to an end, but most Governments can now plan ad without the unremitting pressure of difficulties ke inflation, trade gaps, shortages of essential supplies agricultural development, that so heavily encumbered their efforts in earlier years On the other hand, is little indication that some of the longer-term problems of world food and agriculture have come appreciably nearer to solution For example, food consumption *per capita* in many less developed ntries covering a large part of the world's population still remains below the pre-war level, the wide disparities in consumption (including quality of diet) between the better and the more poorly fed nations d in the previous report on the world social situation have not noticeably diminished, patterns of food production, though less unbalanced than in earlier years, have become too rigid, and world trade in foodstuffs shows little sign of improvement The failure of consumption to expand in many parts of the world in the face of larger supplies and increased potentialities for food production is perhaps the most serious feature of this unbalanced situation This phenomenon finds its most vivid expression in the large food surpluses that have accumulated, chiefly in North America Even in less developed areas there have been difficulties in recent years in marketing supplies, e g, rice in the Far East

Governments have made plans and are executing programmes in the field of food and agriculture on a scale never before envisaged The main objective of these programmes has been, and in many countries still remains, a large expansion of agricultural output[2] with increasing attention to nutritional considerations External aid to Governments, whether in the form of direct aid by other Governments, or in the growing volume of assistance under international technical assistance programmes, has also been directed largely to the same purpose Nevertheless, while there is still considerable scope for improvement in the techniques of production, it is becoming increasingly clear that the complex problems arising from economic and social factors must find a solution especially through more effective marketing distribution, if increased production is to find necessary outlets Measures to increase output and improve efficiency are readily accepted It is far more difficult for Governments to agree on measures for the common good, if such measures appear to conflict with individual national interests The increased international consultations on economic questions in recent years are an encouraging sign, but willingness to make concessions must be much more evident before an optimistic attitude on the more fundamental world food problems becomes justified

## Patterns of production

Two main interrelated factors have governed the development of food production since the situation was reviewed in the last report on the world social situation It will be recalled that many countries in the regions of the world most seriously affected by the Second World War had by then only just recovered the losses in food production which the war inflicted on them Since then, nearly all countries have been primarily concerned to raise their food production substantially, so as to increase *per capita* food supplies which in most countries were still below—and in some seriously below—pre-war levels At the same time, one of the most important conce[illegible] food supplies on the [illegible] hange and balance of [illegible] urrent feature of the earlier post-war situation, and thus make it easier for countries to import the capital and other goods needed to finance agricultural and economic development These two factors powerfully reinforced each other It was clear, however, that the rate of progress achieved in the earlier post war years could not be improved upon or even maintained without far greater conscious efforts on the part of Governments [illegible] ins [illegible] sier [illegible] to [illegible] tis-

[1] The present chapter deals with changes since the period covered by the *Preliminary Report on the World Social Situation* (United Nations publication, Sales No 1952.IV 11) but does not in effect deal with developments beyond 1954-55

[2] This is less true now than at the time the above was written Many major producing countries are now giving increasing attention to marketing schemes and in some cases even to acreage restriction.

*Table 1*

INDEX NUMBERS OF TOTAL FOOD PRODUCTION [a]

| *Region* | *1948/49 1950/51* | *1951/52* | *1952/53* | *1953/54* | *1954/55* |
|---|---|---|---|---|---|
| | | (1934-38 | = 100) | | (Preliminary) |
| Western Europe | 103 | 115 | 115 | 122 | 124 |
| North America | 138 | 139 | 152 | 151 | 145 |
| Latin America | 124 | 125 | 135 | 136 | 139 |
| Oceania | 112 | 104 | 117 | 120 | 116 |
| Far East (excluding China Mainland) | 99 | 102 | 105 | 110 | 109 |
| Near East | 115 | 126 | 135 | 144 | 138 |
| Africa | 123 | 130 | 137 | 142 | 142 |
| All above regions | 115 | 120 | 126 | 130 | 129 |
| World [b] | 107 | 112 | 117 | 120 | 120 |

[a] Excluding fish production

[b] Including estimates for USSR, Eastern Europe, and China

*Table 2*

INDEX NUMBERS OF per capita FOOD PRODUCTION [a]

| *Region* | *1948/49 1950/51* | *1951/52* | *1952/53* | *1953/54* | *1954/55* |
|---|---|---|---|---|---|
| | | (1934-38 | = 100) | | (Preliminary) |
| Western Europe | 94 | 103 | 103 | 108 | 109 |
| North America | 118 | 114 | 123 | 120 | 113 |
| Latin America | 95 | 91 | 96 | 95 | 94 |
| Oceania | 96 | 85 | 93 | 93 | 87 |
| Far East (excluding China Mainland) | 83 | 84 | 85 | 88 | 86 |
| Near East | 97 | 102 | 107 | 113 | 106 |
| Africa | 103 | 105 | 109 | 110 | 109 |
| *All above regions* | 97 | *98* | *102* | *104* | *101* |
| World [a] | 95 | 97 | 100 | 102 | 101 |

[a] Excluding fish production.

factory pre war standards that existed in large parts of the world Such solid gains required planning, land reforms, irrigation and drainage projects, larger supplies of fertilizers and other means of production, and greater application of better methods of production One of the most encouraging features is indeed the extent to which countries (in addition to those whose economies are fully planned) have drawn up plans and put into operation programmes for agricultural development These programmes have been in many instances combined with policies such as price supports to farmers, relaxation of government controls over deliveries, and other measures calculated to *increase incentives to farmers* The continued rapid growth of industrial production and the accompanying increase in national incomes helped to sustain the advance *in* agricultural production, and thus to make possible in time the almost complete abolition of food rationing Tables 1 and 2 disclose the broad development of agricultural production in *recent years*

*In considering the trends shown in these tables*, it should be borne in mind that there were some exceptionally bad seasons in 1934 38, especially in North America, so that the index base may be rather low On the other hand, progress was obstructed by distortions due to the Korean war, which had temporarily stimulated output of agricultural raw materials needed in industry at the expense *of food production*

It will be seen that over the period under review, world food production (excluding fish) has risen by 12 per cent or roughly by 2½ per cent per annum A significant feature of the distribution of this increase is that it has contributed noticeably to some reduction in the worst geographical imbalances in production that characterized the earlier post war situation For example, the [illegible] tern Europe, [illegible] and in two [illegible] Africa In the Far East, where progress in earlier post-war years had been slowest, the pace quickened and production rose by about the world average In Latin America, food production kept pace with the increase in population in the region In contrast, and in the main owing to the efforts made to expand output in Western Europe

in the less developed areas, food production in the ... ng countries of North America and Oceania rose only by a small percentage Efforts to adjust production nwards in North America by curtailing acreage in response to reduced oversea demand were, however, offset by increasing crop yields The volume of food in that region therefore still remains at very high evels and is, in part, responsible for the large surpluses of cereals and other foodstuffs that have emerged, especially in 1953 and 1954 More information has become available on the situation in USSR, Eastern Europe and China in the past two years, but the data are still not complete Apparently the rate of expansion of food output in these regions in recent years was not less than the world average

When the trend in food output is considered in conjunction with changes in population as in table 2, the re presented is somewhat less encouraging World food output per head has regained the pre-war level but nearly all of the absolute increase in production has been offset by rising population *Per capita* output is noticeably ahead of pre-war levels not only in North America, but in Western Europe, the Near East and Africa In the Far East, with almost half the world's population, however, *per capita* output, though rising slowly and painfully, is still substantially below the pre-war level This is the region where the struggle between population and food supplies is most acute Both in Latin America and Oceania, where percentage increase in population is among the highest in the world,[a] *per capita* food output is unchanged or tending to decline

Appendix table A, giving figures on area and production, shows the changes in the patterns of output in the regions by principal food crops since 1948 50

Changes for cereals alone are brought out more clearly in a table below derived from these figures

The increase in world cereal production from pre-war to 1948-50 was entirely due to the large rise in North America From 1948-50 to 1952-54, world production of cereals expanded almost as much again, but this time only one fifth of the increase came from the main grain exporting regions, chiefly from Latin America The largest contributions came from the Far East in particular, as well as from Europe and the Near East It will also be observed that whereas, in the earlier period, rice production in the Far East had declined by over three million tons with a similar fall in other cereals, in the subsequent period total cereal output in the region rose by sixteen million tons, the increase for rice alone being ten million tons

World output of white potatoes, now around pre-war levels, has not changed significantly in recent years This is because in Europe, where production and consumption of white potatoes are about 80 per cent of the world total (excluding the USSR) *per capita* consumption has been declining as other foods have become more abundant On the other hand, production of sweet potatoes and yams continued its post-war expansion in the Far East, Near East and Africa World sugar production in response to rising demand generated by increased incomes, and under the shelter of protective duties in many countries, continued its spectacular expansion Average output in 1952-54 was over 40 per cent higher than pre-war, but whereas, earlier, the main increase came from Latin America, chiefly Cuba, in more recent years expansion has been due to recovery in the Far East and a notable increase in European

[a] In Oceania the high rate of population increase is mostly due to migration and in Latin America to the decrease in mortality

*Table 3*

CHANGES IN CEREAL PRODUCTION [a]

| | *Increase 1948 50 average over pre-war average* | | | *Increase 1952 54 average over 1948-50 average* | | |
|---|---|---|---|---|---|---|
| | *Rice* | *Other grains* | *Total cereals* | *Rice* | *Other grains* | *Total cereals* |
| | | | (Millions of metric tons) | | | |
| Europe | — | − 8.9 | − 8.9 | + 0.6 | + 8.1 | + 8.7 |
| Far East | − 3.3 | − 3.0 | − 6.3 | + 10.0 | + 6.2 | + 16.2 |
| Near East | + 0.7 | + 1.2 | + 1.9 | − 0.5 | + 7.9 | + 7.4 |
| Africa | + 0.8 | + 2.4 | + 3.2 | + 0.3 | + 3.9 | + 4.2 |
| TOTAL ABOVE | − 1.8 | − 8.3 | − 10.1 | + 10.4 | + 26.1 | + 36.5 |
| North America | + 0.8 | + 59.1 | + 59.9 | + 0.7 | + 2.3 | + 3.0 |
| Latin America | + 2.6 | − 3.4 | − 0.8 | + 0.6 | + 5.5 | + 6.1 |
| Oceania | − 0.1 | + 1.6 | + 1.5 | — | + 0.1 | + 0.1 |
| TOTAL ABOVE | + 3.3 | + 57.3 | + 60.6 | + 1.3 | + 7.9 | + 9.2 |
| TOTAL WORLD [b] | + 1.5 | + 49.0 | + 50.5 | + 11.7 | + 34.0 | + 45.7 |

[a] Including wheat, rye, barley oats, maize, millet and sorghum and rice

[b] Excluding USSR.

production Production of pulses as a whole has not kept pace with the growth in world population *Only* in Latin America and Africa does *per capita* production appear to be appreciably higher than in pre-war years Expansion of pulse output in recent years has been disappointing, pulses have a good nutritional value in respect of protein and can contribute significantly to diets in countries where supplies of animal products are low Output of oilseeds for use chiefly as edible oils has been greatly stimulated by relatively high prices of animal fats, especially butter Changes in the patterns of oilseed production since 1948-50 resemble those of grain Whereas, earlier, the main expansion was in North America, and to some extent in Europe, in the later period it came mainly from recovery in the Far East and increased output in Africa and the Near East

The major part of the expansion in world food crop production from 1948 50 to 1952-54 is attributable to an increase in cultivated area For cereals alone, for example, about two thirds of the increase was due to enlarged acreage under cereals and about one third to higher yields per acre The extent to which larger output was due to higher area and yields in the different regions is approximately as follows

*Table 4*

INDICES OF AREA UNDER CEREALS AND YIELDS PER HECTARE

| Region | Area 1948-50 | Area 1952 54 | Yields 1948 50 | Yields 1952-54 |
|---|---|---|---|---|
| | (1934 38 — 100) | | | |
| Europe | 90 8 | 94 0 | 101 8 | 106 3 |
| North America | 106 6 | 102 5 | 145 5 | 154 1 |
| Latin America | 100 0 | 118 0 | 97 4 | 99 3 |
| Oceania | 98 4 | 98 4 | 132 3 | 134 2 |
| Far East | 105 3 | 111 4 | 92 5 | 93 4 |
| Near East | 120 9 | 143 1 | 90 1 | 100 1 |
| Africa | 102 5 | 115 0 | 113 9 | 120 8 |
| World (excluding USSR) | 103 1 | 108 3 | 105 9 | 108 5 |

Noteworthy features are the substantial increases achieved both in area and yield in Europe and especially in the Near East and Africa In the Far East and Latin America, the bulk of the increased production was due to larger area, but average yields per hectare, though still below pre war levels, also rose slightly Yields in North America, while not rising at the spectacular rate witnessed in the earlier post-war years, continued to advance faster than the area under cultivation was reduced

Compared with the pre-war situation, higher levels of cereal output in the Far East, Near East, and Latin America are attributable primarily to expansion in area This is in marked contrast with the position in North America, Oceania and Europe, where the rise has been due entirely or chiefly to higher yields No doubt, in many of the sparsely populated countries of Latin America, it is easier to extend the area under cultivation than to raise yields In the densely populated countries of the Far East, however, the traditional method of increasing output by expanding the area of cultivation tends to lead to intensified population pressure on land

*Table 5*

LIVESTOCK AND FOOD CROP PRODUCTION IN 1954/55

| Region | Total livestock | Food crops |
|---|---|---|
| (1934-38 = 100) | | |
| North America | 148 | 132 |
| Oceania | 121 | 113 |
| Western Europe | 117 | 118 |
| Africa | 132 | 144 |
| Near East | 125 | 145 |
| Latin America | 131 | 147 |
| Far East (excluding China Mainland) | 95 | 112 |

Imbalances in the world production of livestock, in contrast to imbalances in food crops, show little tendency to diminish In the less developed regions of Africa, the Near East, and in most countries of Latin America and the Far East, the main concern continued to be the expansion of food crops of high energy value Livestock output in these regions has not kept pace with food crop production In the Far East it does not even appear to have regained its pre war level The same situation also appears to prevail in the USSR and Eastern Europe In the former country, cereal production is now somewhat above pre-war, but livestock numbers have not yet quite recovered Cattle numbers in Eastern Europe are also below pre-war levels On the other hand, post war developments appear to have strengthened the trend towards increased livestock output in the countries with more advanced agricultures, especially in those where incomes have been steadily rising More recently, a contributing factor has been the large supplies of grain in some of these countries, where, in the absence of adequate outlets, increasing quantities are being fed to livestock

In North America and Oceania, indices of livestock production are well ahead of indices of crop production In Western Europe, where, it will be recalled, the post-war starting point for livestock was substantially below that for food crops, progress in recent post-war years has been more rapid, so that by 1954/55 the indices for livestock and food crop production had achieved a balance

The low level of livestock production—and consequently the seriously inadequate consumption of animal protein—in the less developed regions of the world remains one of the most intractable problems of world food and agriculture In recent years, some countries where the intake of animal protein is particularly low have attempted partially to alleviate the position by larger fish production It would appear that world fish production has now expanded by about 25 per cent from pre-war levels Although the major increases in absolute tonnage have occurred in the well established

· developed fisheries of Europe, North America, apan and the USSR, the percentage increases in recent in countries in the Far East, for example, India, hilippines and Thailand, are noteworthy

## Food consumption and nutrition levels

The *Preliminary Report on the World Social Situation* the nature and the limitations of the main of information on average diets of people in fferent parts of the world, *viz*, food balance sheets dietary surveys Unfortunately, it is still true that our knowledge is seriously deficient', especially for less developed regions of the world, in spite of the of data which is being slowly gathered in many

However, the available information permits some clusions as to the trends in the food supply situation ring the latter part of the post-war period In the st place, the countries in which the calorie levels were or less adequate during the years immediately after the war have maintained or slightly improved the achieved in the early post-war period This is lly true of Western Europe and some Latin American countries, for example, Uruguay In other regions, such as the Near East, Far East and Eastern Europe, ere the supplies were inadequate in the early post-war years, a slow but steady increase can be observed Various factors have contributed to this improvement, including favourable weather conditions, coupled in some with a substantial increase of the area under cultivation, efforts of Governments to improve economic and social conditions through technological improve- in agricultural production, and careful planning of agricultural development with increased application of sound nutritional principles Many Governments are showing an increasing awareness of the need raising levels of nutrition through the development of such measures as school feeding programmes and education in nutrition Increasing emphasis is also being given to the development of home economics activities aimed at a general improvement of conditions in the home, including dietary practices

However, in spite of a general improvement in the levels of food consumption, much remains to be done,

fall short of estimated requirements At best, it may be said that in many countries in the Far East, Near East and Latin America, the magnitude of the deficit has been reduced On the other hand, in some Western European countries, where the available supplies *per capita* exceed requirements, the excess has tended to decrease

It should be remarked, however, that calorie intake gives only an indication of the quantity of food consumed Other factors like the consumption of "protective foods" (meat, milk, eggs, fish, pulses, fruits and vegetables), have to be taken into consideration to judge qualitative changes in the pattern of consumption The content of animal protein in the diet is a fairly good indication of its quality, because foods rich in animal protein are a good source of many other essential nutrients Moreover, as foods rich in animal protein are usually expensive, both in terms of cost to the consumer and of agricultural resources, their presence in large amounts in the national diets indicates that in such countries there are no reasons of an economic nature limiting the quality of the diet In some regions where levels of animal protein are low (the Far East and the Near East), the content of this nutrient in the average national diet shows a slight tendency to increase, although the intakes are still far from adequate In Latin America (River Plate countries excluded) the trend appears to be downward since pre war years Western Europe has been recuperating steadily since 1947/48 and has almost reached pre-war levels In those countries where levels of consumption are very high (North America, Oceania and River Plate countries), the levels are about the same as those of the early post-war years

Another general indicator of the quality of national food supplies is the proportion of the total calories furnished by carbohydrate rich foods, *viz*, cereals, starchy roots, and sugar When this proportion is unduly high, it affords some evidence of nutritional unbalances This indicator is also to some extent associated with changes in the level of income Where calorie intake is seriously inadequate as a result of low income, more of these foods may be consumed as purchasing power rises, since these are usually the cheapest sources of calories and will help to bring the diet up to more adequate calorie levels Where calorie levels are already adequate, increased incomes are more likely to result in a shift from cereals and starchy roots towards more expensive protective foods This does not apply, however, to some foods like sugar, the demand for which tends to increase with rising incomes, owing to its considerable use in many luxury foods and beverages

Table 6 shows that the historic trend towards lower consumption of cereals and starchy roots in high- and medium income countries, interrupted and reversed by the war in many countries, has once again reasserted itself Especially striking is the sharp decline in this proportion which has accompanied the rapid increase in *per capita* income and food output in recent years in Austria and the Federal Republic of Germany Indeed, in all high- and medium income countries in Europe the trend is for the proportion of calories derived from these two groups to fall to around 50 per cent In some lower income countries in Europe the proportion, though tending to decline somewhat, is still about two thirds In the very high income countries of North America and Oceania where food output *per capita* is the greatest, the proportion is mostly well below 50 per cent and is still falling On the other hand, in most of the very low income countries in the Far East and Near East the proportion is still around 80 per cent or not far short of this figure In recent years, however, there appears to have been a slight improvement in the majority of the lowest income countries, and this improvement would have been more noticeable but for

a rising consumption of sugar Thus, although this indicator suggests a general improvement during the past few years, it also affords evidence that, as regards the quality of the diet, the gap between the advanced and the less developed countries has tended to widen

*Table 6*

PERCENTAGE OF *per capita* CALORIES SUPPLIES DERIVED FROM CEREALS, STARCHY ROOTS, AND SUGAR

| *Country* | *1948/49 1949/50 average per cent* | *1952/53 1953/54 average per cent* |
|---|---|---|
| *Far East* | | |
| India | 75 | 76 |
| Japan | 81 | 78 |
| Pakistan | 80 | 78 |
| *Africa and Near East* | | |
| Egypt | 78 | 78 |
| Southern Rhodesia | 80 [a] | 79 [b] |
| Turkey | 79 | 77 |
| Union of South Africa | 76 [a] | 76 [b] |
| *Latin America* | | |
| Argentina | 56 [c] | 52 [d] |
| Brazil | 66 [e] | 66 [d] |
| Chile | 74 [e] | 69 [d] |
| Colombia | 68 [a] | 63 [d] |
| Mexico | 72 [c] | 72 [d] |
| Uruguay | 48 [a] | 49 [b] |
| *Europe* | | |
| Austria | 65 | 58 |
| France | 60 | 57 |
| Germany (Federal Republic) | 68 | 54 |
| Greece | 66 | 64 |
| Italy | 70 | 68 |
| Netherlands | 58 | 51 |
| Portugal | 64 | 65 |
| Sweden | 50 | 48 |
| United Kingdom | 52 | 50 |
| *North America* | | |
| Canada | 45 | 44 |
| United States of America | 43 | 42 [b] |
| *Oceania* | | |
| Australia | 51 | 50 |
| New Zealand | 47 [f] | 43 [b] |

[a] 1949/50 average
[b] 1952/53 average
[c] 1948
[d] 1951/52 average
[e] 1949
[f] 1948/49 average

Consumption of protective foods shows some improvement in many countries over the levels of 1949/50 (see appendix tables C and D) In Western Europe, the consolidation of early improvements in the economic situation and the purchasing power of the population made possible a gradual rise in the consumption of livestock products, especially meat, at the same time, fish consumption has followed a parallel trend in most countries of the region North America, Oceania and the River Plate countries, where meat consumption has been high and that of fish rather low, have remained at about the same levels Slight improvements may be noted in some countries of the Far East

Milk consumption has followed the same trend as indicated in the *Preliminary Report* In Western Europe, consumption of milk and dairy products shows some increase There are indications, however, that a large part of the increased production is used for the manufacture of dairy products This is reflected in the fact that the percentage consumed as liquid milk is in most cases slightly lower than it was three or four years ago, in spite of the fact that the consumption of liquid milk in absolute terms has been maintained at previous levels

Since the war, many countries have initiated or expanded schemes to improve the nutrition of vulnerable groups by providing "protective foods", particularly milk for children and mothers through such channels as schools and maternal and child health centres International action has helped to stimulate such welfare measures by making surplus dried skim milk available and also by assisting with the development of the dairy industry in countries receiving imported milk supplies so that increasing use can be made of locally produced milk In many instances milk distribution programmes have formed a focus for nutrition education activities aimed not only at encouraging the consumption of milk but at improving dietary habits generally

In some regions the situation with respect to milk consumption has been rather stable although two main points should be made clear first, the figures for North America and Oceania, usually high consumers of milk and dairy products, show a small decrease in the consumption of those products, and second, many countries have shown increasing realization of the value of milk for vulnerable groups, and have continued to encourage consumption of this food A recent sharp rise in milk production has been reported for the USSR

## ECONOMIC PROBLEMS OF PRODUCTION AND MARKETING

Reference has been made earlier to the fact that the agricultural shortages of early post-war years, especially in war-torn territories, and the existence of the dollar gap, were the most powerful incentives in hastening the progress of agricultural recovery and in reducing some of the worst imbalances in production patterns existing after the war The need for action to cope with these serious problems was so impelling that it is not surprising that individual Governments, for the most part, took measures appropriate to their respective countries with scant regard for the effect their policies might have on others So long as food shortages continued, this did not appear to have serious consequences With the ending of the widespread food shortage, however, it became apparent that unco ordinated action, while it succeeded in lessening production imbalances, was likely to cause new serious distortions in the long term patterns of production, trade, and consumption Many Governments, it is true, tried to increase production through

gher yields and greater efficiency In particular, many the measures taken in under-developed countries with to land reform, irrigation, increased agricultural tension services, better credit facilities for farmers, etc, ay be expected in time to reduce present disadvantages efficiency and production costs in relation to better- countries The fact remains, however, that efforts many countries towards greater self-sufficiency have ontinued very largely with regard to precisely the com- ities which are in surplus in other parts of the world ed agricultural development and greater self suffi- ency have become an integral part of the planning of iese countries

Price incentives to farmers, whether in the form of support, subsidies or other measures, have played vo main roles in agricultural policy While in some es they were chiefly intended as a spur to larger t many countries, especially the food-exporting ountries, used them in varying degrees as a principal of maintaining the income of the farm popula- With memories of the depressed state of agri- in the early thirties, new concepts of full employ- and social welfare made the maintenance of a 'e level of farm incomes a matter of public Nevertheless, as food production became more abundant, farm prices and income showed a tendency decline, while income received by industrial workers ed to rise steadily This, of course, far from an exceptional occurrence is a phenomenon that manifested itself repeatedly in the past Part of the may reside in the relative inelasticity of the for foodstuffs compared with that of other onsumption goods In the less developed areas, with strong resistance on the part of rural population to ange in traditional methods, it is also likely that effi methods of production are more readily adopted industry than in agriculture Whatever the cause, appears to be a pronounced inherent tendency for income to fall behind industrial income, unless spe ial measures are taken to reinforce the position of the armer

There are indeed few countries in the world where age earnings in agriculture are in any way compar- with those in other occupations In the United , for example, higher farm output and price sup increased *per capita* farm income from 37 per cent the average earnings of workers in industry before war to a peak of 80 per cent in 1947, but by 1953 had fallen back to only 50 per cent Partly because the special measures taken for the benefit of farmers, relative position of the farmer in most countries is ll appreciably better than in 1938, but in recent years deteriorated in the majority of countries for which timates are available In Finland, Greece, Italy and Japan the decline from the relatively favourable post war position has been very sharp In these circum- the need to support farm incomes through price supports and other measures is once again underlined and few Governments can afford to ignore demands for action of this kind Nevertheless, price support measures, even if taken only as a means of maintain ing farm income, must have the effect of expanding out put, unless accompanied by fairly rigid controls over acreage When such controls are not effectively exer- cised, the effect on output is similar to that of price measures taken in the interest of greater self sufficiency

It is of course extremely difficult for Governments to judge to what lengths greater self sufficiency should be pursued in a world where the interplay of economic forces is everywhere modified by government action and where strategic and other considerations besides the purely economic must be taken into account It may be that in some countries policies of self-sufficiency have been pressed forward patently beyond the point at which they are economically justified, and have not only restricted imports of food, but resulted in higher food prices to the consumer Again, the growing practice of some food exporting countries in recent years of sub- sidizing food exports as a means of maintaining domes- tic prices at support levels normally tends to restrict consumption in these countries, and can constitute a threat to the stability of international markets and farm income in recipient countries These policies, which have been pursued singly or in various combinations on almost a world wide scale, have contributed to an expansion in the production of some major foods beyond the point at which they can be absorbed by demand at current prices to consumers This has happened despite the rise in national incomes in nearly all countries For while the response of demand for food to income changes is, of course, important, especially in less developed regions where food consumption is low, the evidence suggests that the consumer response of demand to retail price changes is as large or larger

Here it is relevant to note that the recent fall in farm prices has not been accompanied by anything like a corresponding fall in retail prices To a large extent this may reflect rigidity in the structure of marketing costs but the removal of controls and the elimination and reduction of food subsidies as food supplies became more abundant also contributed to some extent to this situation Because of the high prices of foodstuffs in relation to other consumable goods and despite increased real incomes, the fact is that in many countries purchases of food now absorb a larger proportion of total consu- mer expenditures than they did before the war Figures illustrating this unusual phenomenon are shown in table 7

These figures help to explain why purchasing power has once more become the most important limiting factor on the sales and consumption of food Other factors, like shifts in consumer demand, have also contri- buted It is probable, however, that food output in recent years would have been larger still but for this limiting factor As it is, lack of effective demand to absorb higher output has resulted in a heavy accumula- tion of surplus food which cannot be disposed of readily through normal market channels At the same time the drive towards greater self sufficiency on the part of food importing countries has largely prevented any expansion in world trade in food as a whole Appendix table B gives estimates of the growth of stocks of major food commodities in recent years It will be seen that

*Table 7*

EXPENDITURE ON FOOD AS A PERCENTAGE OF TOTAL PERSONAL EXPENDITURE

| *Country* | *1938* | *Recent post-war years* |
|---|---|---|
| Denmark | 25 | 30 |
| Ireland | 36 | 33 |
| Norway | 32 | 29 |
| Sweden | 32 | 32 |
| Germany Federal Republic of | 31 | 32 |
| United Kingdom | 30 | 32 |
| Canada | 25 | 26 |
| United States | 31 | 36 |
| Honduras | 46 | 48 |
| Puerto Rico | 41 | 46 |
| Japan | 36 | 51 |

by 1956 stocks of wheat in the four major exporting countries, the United States, Canada, Argentina and Australia, amounted to 80 per cent of their average annual production and were about two and one half times as large as annual average exports of wheat from these countries Stocks of coarse grain in the United States and Canada were six times as large as their annual average exports The accumulation of heavy stocks of grain in North America is, of course, in part due to a succession of exceptionally favourable seasons as well as to continued improvement in productive efficiency Appendix table A shows, for example, that despite the appreciable reduction in acreage to grain in recent years compared with 1948-50, grain output in the region rose by three million tons During this period, however, cereal output in the Far East and Europe accounted for twenty-five million tons of the total rise in world cereal production, thus greatly augmenting the difficulties of finding outlets for surplus North American grain supplies Indeed, owing to high prices, difficulties began to emerge in the disposal of stocks of rice even in the Far East Now that rice prices have eased, stocks of rice in the exporting countries of the Far East appear to be falling, though they are still rising in the United States and Mediterranean exporting countries

The stagnation of world food trade in recent years in the face of this surplus situation and the continuing increases of world population are illustrated by the figures below

The absence of any significant upward movement in world trade in foodstuffs, despite higher incomes and

*Table 8*

| *Volume of world trade in food and feeding stuffs* | | *World population* | |
|---|---|---|---|
| *(1934-38 = 100)* | | *(1934 38 = 100)* | |
| 1951 | 103 | 1951 | 117 |
| 1952 | 98 | 1952 | 119 |
| 1953 | 102 | 1953 | 121 |
| 1954 (prov) | 100 | 1954 | 123 |

*Table 9*

REGIONAL TRENDS IN INTERNATIONAL TRADE IN FOOD AND FEEDING STUFFS

| | *1951* | *1952* | *1953* | *1954* |
|---|---|---|---|---|
| A *Gross exports from the countries of the region specified* | | | | |
| *(1934 38 = 100)* | | | | |
| Western Europe | 109 | 97 | 106 | 121 |
| North America | 368 | 380 | 315 | 261 |
| Latin America | 78 | 55 | 84 | 87 |
| Oceania | 100 | 104 | 113 | 104 |
| Far East (excluding China Mainland) | 46 | 44 | 47 | 43 |
| Near East | 106 | 121 | 155 | 203 |
| Africa | 106 | 114 | 126 | 139 |
| B *Gross imports into the countries of the region specified* | | | | |
| (1934-38 = 100) | | | | |
| Western Europe | 96 | 89 | 92 | 92 |
| North America | 106 | 111 | 112 | 112 |
| Latin America | 159 | 158 | 170 | 152 |
| Oceania | 291 | 291 | 147 | 149 |
| Far East (excluding China Mainland) | 118 | 119 | 113 | 104 |
| Near East | 270 | 252 | 236 | 202 |
| Africa | 132 | 136 | 143 | 135 |

larger food output, contrasts markedly with the vigorous expansion in world trade generally While the former has remained more or less stationary since 1951, when it regained its pre-war level, the latter has risen almost uninterruptedly during the post-war period and is now roughly 60 per cent above the volume in pre-war years The lack of progress in world trade in foodstuffs as a whole has, however, been accompanied by some pronounced shifts in the patterns of food trade, especially since 1952 The drive towards greater self-sufficiency on the part of many countries had its sharpest impact on North American exports of food After having reached a peak level in 1952 of nearly four times their pre-war volume, they declined by about one third from this level in 1954 The decline for wheat, maize and rice alone amounted to ten million tons, or nearly 40 per cent of these cereals exported in 1952 With the exception of the Far East and Oceania, food exports from other regions have increased appreciably since 1952 This is especially the case for the Near East, owing mainly to the expansion in cereal production, notably in Turkey European exports of foodstuffs are chiefly to other countries of the region Recovery from the low early post war level of export was slow but the upward trend has become more pronounced in the last few years, aided by trade liberalization and the operations of the European Payments Union Exports of the Far East, largely of rice and other foods, to countries within the region appear to have become stabilized at rather less than half the pre war level Despite more abundant food supplies in the region, exports have been restricted by such factors as the high price of rice in relation to wheat, larger output of rice

in importing countries and a shrinking world market for vegetable oils Some recovery in Latin American food exports was due principally to higher cereal production in Argentina after some years of depressed output.

On the import side the picture is simpler Western Europe, the largest food importing region, has stabilized its food imports at around 10 per cent below the pre-war level, owing chiefly to the fact that domestic food production in the region has expanded more rapidly than the increase in population Food imports of most of the other regions are appreciably higher than the pre-war volume, but have mostly declined since 1952. Especially significant is the decline in Far Eastern imports, principally grain, owing to recovery of domestic production

### Principal issues ahead

In considering the possibilities of narrowing the gap between requirements and supplies, the rate of growth of the world population in the years ahead is a factor of considerable importance World population is increasing at the rate of about 1½ per cent per annum.

The rate of increase in food production during the last few years has been of the order of 2½ per cent per annum. These figures, however, do not tell the whole story, since both the rate of population growth and the rate of increase in agricultural production vary greatly between countries and regions In the Far East, for instance, the figure for population growth is around 1¼ per cent per annum Following the slow expansion in early post-war years, agricultural production has been increasing in recent years by about 2 per cent per annum In Latin America the corresponding figures are 2 4 per cent and 2.2 per cent Some rough calculations indicate that it will require a dramatic increase in food supplies to feed the population of the world at the current levels of consumption in, say, twenty five years from now Supplies of cereals, for instance, would have to be increased by some 300 million tons or 43 per cent and the supplies of protective foods by even higher percentages *Allowance will have to be made, however,* for some improvement in food consumption levels In this case the increase in total food supplies needed will be even greater Since, moreover, the rate of increase and the magnitude of the deficit differ between one region and another, it is clear that some regions will have to accelerate the rate of increase of their food supplies For instance, supplies of cereals in the Far East and Near East will have to be increased by about 80 per cent to feed the population at a slightly improved level, while the corresponding figure for Latin America is about 45 per cent

The *Preliminary Report on the World Social Situation* laid main emphasis on the need to achieve a widespread increase in food production, especially in the less developed areas, and on the measures required to attain this end As has been shown, a remarkable increase in food output has in fact occurred during the past few years, with a substantial contribution from the less developed regions It is now clear that the technical obstacles to a further expansion of output and to higher efficiency in farm and fisheries production are not insuperable This is not to imply that such further expansion may be taken for granted On the contrary, the figures quoted immediately above show the continuing need for planned efforts to raise food output far beyond present levels, if satisfactory food standards are to be reached in future years Land reforms, irrigation, provision of more fertilizers and better seeds, growth of agricultural extension services, more credit facilities, must be pushed forward with equal if not greater vigour Most of all, there is a need for a far larger volume of foreign capital in those countries where domestic resources are at present—and likely to remain for some years—inadequate for agricultural development It is also apparent, nevertheless, that a fundamental requisite for continued growth in food production—namely the assurance of a steadily expanding effective demand for food—is largely lacking In its absence, unwieldy surpluses may accumulate further and endanger world markets, trade in foodstuffs may continue to stagnate, and production itself may be cut back in countries most advantageously placed to raise output In these circumstances, it is clear that the main emphasis for the immediate years ahead is on ways in which effective demand can be raised and on the solution of the economic problems that obstruct the attainment of this objective Emphasis must also be given to intensive programmes for education in nutrition, which would encourage better habits of diet The results of such programmes would be reflected in increased demand for various commodities

One need would appear to be to diminish the over-emphasis placed by many countries on the attainment of self sufficiency regardless of cost. Another is a careful assessment of price support policies, especially those which give fixed price support levels for individual commodities already in ample supply Systems which put primary emphasis on maintaining farm incomes as a whole are likely to give greater flexibility in production than those which maintain more or less fixed price-support levels for each single commodity Measures for *maintaining farm income by reducing production costs* rather than by offering price supports, e g , fertilizer subsidies or grants for specific operations, can result in a net economy to the State and also benefit consumers. Policies relating to self sufficiency and price supports are, however, precisely those in which the international interest often appears to conflict most seriously with national interests. The solution of the problems to which they give rise can scarcely be achieved without a greater measure of international co-operation than is at present evident, although acknowledgement of the urgency of these problems is steadily increasing

Nevertheless, despite these major difficulties, there is considerable scope for increasing the effective demand for foodstuffs Measures to raise *per capita* income would produce the largest increase in effective demand, if concentrated on the least developed countries and on the poorer social groups within these countries. In the shorter run greater scope probably exists for effective demand by a reduction in retail ence has been made earlier to the rigidity costs. These margins have, in fact,

*Appendix*

AREA AND PRODUCTION OF

| Crop | World (Exc USSR) 1934-38 | World (Exc USSR) 1948-50 | World (Exc USSR) 1952 54 | Europe 1934-38 | Europe 1948-50 | Europe 1952 54 | North America 1934-38 | North America 1948 50 | North America 1952 54 |
|---|---|---|---|---|---|---|---|---|---|
| **AREA** | | | | | | | | | |
| 1,000 000 hectares | | | | | | | | | |
| Wheat | 128 1 | 131 8 | 136 2 | 29 9 | 27 6 | 28 7 | 32 6 | 38 9 | 36 3 |
| Rye | 16 0 | 14 7 | 14 7 | 13 5 | 12 1 | 11 8 | 1 6 | 1 3 | 1 1 |
| Barley | 35 7 | 37 7 | 42 3 | 9 4 | 8 6 | 10 1 | 5 6 | 7 0 | 7 5 |
| Oats | 38 1 | 37 1 | 36 8 | 14 6 | 12 7 | 12 2 | 19 6 | 20 7 | 20 3 |
| Maize | 83 9 | 82 7 | 86 4 | 11 7 | 10 8 | 11 4 | 37 9 | 34 1 | 32.8 |
| Millet and sorghum | *69 6* | *74 7* | *81 5* | *0 3* | *0 2* | *0 2* | *1 6* | *3 2* | *3 0* |
| Rice (paddy) | 85 8 | 92 8 | 97 2 | 0 2 | 0 3 | 0 4 | 0 4 | 0 7 | 0 8 |
| TOTAL GRAINS [a] | 457 2 | 471 5 | 495 1 | 79 6 | 72 3 | 74 8 | 99 3 | 105 9 | 101 8 |
| Potatoes | 13 5 | 12 9 | 12 8 | 10 0 | 9 4 | 9 3 | 1 5 | 0 9 | 0 7 |
| Sweet potatoes and yams | 6 6 | 7 7 | 7 9 | — | — | — | 0 3 | 0 2 | 0 2 |
| Total pulses [b] | 33 6 | 37 7 | 36 7 | 5 6 | 5 3 | 5 2 | 0 8 | 0 9 | 0 7 |
| Total oilseeds [a] | 68 5 | 73 1 | 81 1 | 1 2 | 2 5 | 2 5 | 13 8 | 17 2 | 18 6 |
| **PRODUCTION** | | | | | | | | | |
| 1,000 000 metric tons | | | | | | | | | |
| Wheat | 129 3 | 143 2 | 159 7 | 42 4 | 40 5 | 45 4 | 26 6 | 42 1 | 45 [illegible] |
| Rye | 21 0 | 19 4 | 19 8 | 19 1 | 17 6 | 17 2 | 1 2 | 1 0 | 1 [illegible] |
| Barley | *41 3* | *44 9* | *54 6* | *14 4* | *14 2* | *17 9* | *6 3* | *9 5* | *11 [illegible]* |
| Oats | 45 1 | 48 3 | 49 2 | 23 0 | 19 7 | 20 0 | 19 0 | 25 5 | 25 [illegible] |
| Maize | 110 3 | 138 2 | 140 1 | 17 4 | 15 4 | 15 0 | 53 2 | 84 2 | 81 [illegible] |
| Millet and sorghum | 49 5 | 51 3 | 55 9 | 0 2 | 0 2 | 0 2 | 1 2 | 4 3 | 3 [illegible] |
| Rice (paddy) | 151 2 | 152 8 | 164 5 | 1 1 | 1 1 | 1 7 | 1 0 | 1 8 | 2 [illegible] |
| TOTAL GRAINS [a] | 547 7 | 598 1 | 643 8 | 117 6 | 108 7 | 117 4 | 108 5 | 168 4 | 171 4 |
| Sugar centrifugal raw, and non-centrifugal cane sugar | 27 9 | 33 3 | 39 3 | 6 6 | 7 5 | 9 4 | 2 8 | 3 0 | 3 3 |
| Potatoes | 159 3 | 160 7 | 161 6 | 135 4 | 130 7 | 132 1 | 11 9 | 14 2 | 11 5 |
| Sweet potatoes and yams | 46 6 | 60 1 | 58 9 | 0 1 | 0 2 | 0 2 | 1 8 | 1 1 | 0 8 |
| Total pulses [b] | 21 5 | 22 6 | 23 1 | 3 1 | 2 6 | 2 8 | 0 8 | 1 1 | 1 0 |
| *Total oilseeds* [a] | *41 2* | *47 8* | *53 2* | *0 8* | *1 7* | *1 9* | *6 9* | *14 3* | *15 8* |

[a] Includes wheat, rye, barley, oats, maize, millet and sorghum, and rice

[b] Includes dry peas, broad beans, chick-peas, and lentils.

recent years Many measures could be taken to improve outmoded marketing systems, including more co operative marketing, better storage and transport facilities, and improved systems of controlling grades and standards Nor must the possibility of reducing retail prices by increased efficiency in farm production be overlooked

The removal of the threat of continuing accumulation of unmarketable surpluses itself depends to a large extent on the willingness of Governments to take the necessary steps, nationally and internationally, to reduce rigidities in the patterns of production and to expand effective demand This is also largely true for the possibilities of expanding international trade in foodstuffs Recognition of the need to diminish the most serious obstacles to trade is growing, and in some coun- [illegible]

inflation In this improved situation, there is hope that further efforts to lessen trade restrictions, especially through GATT (General Agreement on Trade and Tariffs), may stand some chance of success Apart from this possibility, there exists scope for some exporting countries to increase sales by shaping their production to meet a growing trend in world demand for certain foods such as beef, fruits, cocoa and sugar, by improvements in grading and packing and by measures to reduce marketing costs Instability of prices of agricultural products on international markets still remains a severe handicap to importing and exporting countries The difficulties of attaining greater price stability in the years ahead are likely to persist The best hope of achieving progress in this field appears to lie in an approach, on a gradual commodity-by-commodity basis, through international consultations, even in cases where international commodity agreements like those for sugar and wheat are not feasible

r CROPS BY REGIONS

| | Latin America | | Near East | | | Far East | | | Africa | | | Oceania | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1948-50 | 1952-54 | 1934-38 | 1948-50 | 1952 54 | 1934-38 | 1948-50 | 1952-54 | 1934-38 | 1948 50 | 1952 54 | 1934-38 | 1948 50 | 1952-54 |
| | | | | | | | Area | | | | | | | |
| | | | | | | | 1 000 000 hectares | | | | | | | |
| 91 | 7 7 | 8 8 | 9 6 | 11 4 | 14 5 | 36 8 | 36 5 | 37 8 | 4 7 | 4 7 | 5 8 | 5 3 | 5 0 | 4 3 |
| 5 | 0 7 | 1 2 | 0 4 | 0 5 | 0 6 | — | — | — | — | 0 1 | — | — | — | — |
| 0 | 1 2 | 1 5 | 4 4 | 5 4 | 6 3 | 11 5 | 11 5 | 11 9 | 3 5 | 3 6 | 4 3 | 0 2 | 0 4 | 0 7 |
| 0 | 0 9 | 1 0 | 0 2 | 0 3 | 0 4 | 1 5 | 1 4 | 1 5 | 0 4 | 0 4 | 0 4 | 0 7 | 0 7 | 1 0 |
| 0 | 13 6 | 16 1 | 1 3 | 1 5 | 2 0 | 13 0 | 15 3 | 16 0 | 5 9 | 7 3 | 8 0 | 0 1 | 0 1 | 0 1 |
| | 0 4 | 0 5 | 4 4 | 5 3 | 5 5 | 47 9 | 52 1 | 57 2 | 15 2 | 13 5 | 15 0 | — | — | 0 1 |
| 4 | 2 7 | 3 0 | 0 8 | 1 1 | 0 9 | 81 3 | 85 4 | 89 5 | 1 7 | 2 6 | 2.6 | — | — | — |
| 2 | 27 2 | 32 1 | 21 1 | 25 5 | 30 2 | 192 0 | 202 2 | 213 9 | 31 4 | 32 2 | 36 1 | 6 3 | 6 2 | 6 2 |
| 37 | 0 9 | 1 0 | 0 1 | 0 1 | 0 2 | 1 1 | 1 4 | 1 4 | 0 1 | 0 1 | 0 1 | 0 1 | 0 1 | 0 1 |
| 34 | 0 4 | 0 4 | — | — | — | 3 4 | 4 7 | 4 7 | | 2 4 | 2 6 | — | — | — |
| 4 | 4 0 | 4 3 | 1 4 | 2 0 | 1 9 | 22 4 | 24 1 | 23 0 | 1 0 | 1 4 | 1 6 | — | — | — |
| | 7 0 | 6 9 | 1 9 | 2 5 | 3 1 | 40 9 | 38 3 | 43 4 | 4 6 | 5 6 | 6 5 | — | — | — |
| | | | | | | | Production | | | | | | | |
| | | | | | | | 1 000 000 metric tons | | | | | | | |
| 36 | 8 1 | 10 7 | 9 9 | 10 1 | 14 2 | 34 9 | 33 9 | 34 6 | 2 5 | 2 9 | 3 7 | 4 4 | 5 6 | 5 2 |
| 3 | 0 4 | 1 0 | 0 3 | 0 4 | 0 6 | — | — | — | — | — | — | — | — | — |
| 09 | 1.2 | 1 8 | 4 3 | 4 7 | 6 5 | 13 0 | 12 3 | 13 2 | 2 1 | 2 5 | 3 0 | 0 2 | 0 5 | 0 8 |
| 09 | 0 9 | 1 3 | 0 3 | 0 3 | 0 4 | 1 3 | 1 1 | 1 2 | 0 3 | 0 3 | 0 3 | 0 4 | 0 5 | 0 7 |
| 0 | 14 5 | 15 7 | 2 4 | 2 3 | 3 3 | 14 6 | 16 0 | 16 4 | 4 5 | 5 7 | 7 8 | 0 2 | 0 1 | 0 1 |
| 2 | 0 4 | 0.5 | 2 6 | 3 2 | 3 9 | 37 2 | 34 7 | 38 8 | 8 0 | 8 4 | 8 9 | — | 0 1 | 0 1 |
| 2.0 | 4 6 | 5 2 | 1 7 | 2 4 | 1 9 | 143 7 | 140 4 | 150 4 | 1 6 | 2 4 | 2 7 | 0 1 | 0 1 | 0 1 |
| 19 | 30 1 | 36 2 | 21 5 | 23 4 | 30 8 | 244 7 | 238 4 | 254 6 | 19 0 | 22 2 | 26 4 | 5 3 | 6 9 | 7 0 |
| 79 | 13 2 | 14 0 | 0 2 | 0 4 | 0 6 | 8 3 | 6 9 | 9 0 | 0 9 | 1 3 | 1 6 | 0 9 | 1 0 | 1 4 |
| | 4 7 | 5 5 | 0 3 | 0 9 | 1 4 | 7 7 | 8 8 | 9 7 | 0 6 | 0 8 | 0 8 | 0 5 | 0 6 | 0 6 |
| 2.2 | 2 6 | 2 6 | — | — | — | 27 2 | 39 5 | 47 0 | 15 2 | 16 6 | 18 2 | 0 1 | 0 1 | 0 1 |
| 1 6 | 2 4 | 2 7 | 1 0 | 1 3 | 1 3 | 14 4 | 14 3 | 14 3 | 0 5 | 0 9 | 1 0 | — | — | — |
| 3 4 | 3 8 | 3 7 | 1 3 | 1 7 | 2 0 | 27 0 | 23 7 | 26 4 | 1 8 | 2 6 | 3 3 | — | — | — |

[a] Includes soybeans groundnuts cottonseed linseed rapeseed sesame and sunflowerseed

The most obvious threat to the stability of international prices of foodstuffs in the immediate years to come lies in the present heavy accumulation of surplus food stocks The orderly disposal of these surpluses requires the utmost care and vigilance to prevent a serious impairment of confidence in prices and world markets Many countries have agreed to a set of principles drawn up by the Food and Agriculture Organization for surplus disposal which, if adhered to in practice, would remove the danger of a collapse in prices of the kind that occurred between the wars The continuance of international consultations on stock disposals is essential to this end Commendable restraint has so far been shown by the principal countries holding such stocks in disposing of them Provided such care continues to be shown, surpluses can help to improve consumption levels materially in countries where food supplies are inadequate Certain foods, which have a high nutritive value, such as dried skim milk, of which the surpluses have been very great, can be of special importance in improving nutrition Welfare programmes, such as national child feeding programmes, offer a [illegible]

nutrition education activities, also do much to impart a knowledge of nutrition and to encourage better habits of diet generally Thus, the use of surpluses can have a long term rather than a transient effect upon food and nutrition in a receiving country In addition to their provision (free or at reduced prices) for use in feeding programmes to ensure better nutrition for vulnerable groups they can, under the proper safeguards, serve to finance a more rapid rate of economic development in less developed countries

*Appendix B*

ESTIMATED STOCKS OF MAJOR FOODS 1951 55

*(In million metric tons)*

| Commodity | Month | Stocks 1951 | 1952 | 1953 | 1954 | 1955 prel | Production 1951 54 average | Gross Exports 1951-54 average |
|---|---|---|---|---|---|---|---|---|
| WHEAT [a] | | | | | | | | |
| United States | 1 July | 10 8 | 7 0 | 15 3 | 24 5 | 27 0 | 30 0 | 8 8 |
| Canada | 1 Aug | 5 1 | 5 9 | 10 0 | 15 9 | 12 8 | 14 7 [b] | 8 7 |
| Argentina | 1 Dec | 0 5 | 0 1 | 2 0 | 1 6 | | 5 9 | 2 1 |
| Australia | 1 Dec | 0 5 | 0 5 | 1 0 | 2 6 | 2 5 | 4 9 | 2 4 |
| TOTAL 4 MAJOR EXPORTERS | | 16 9 | 13 5 | 28 3 | 44 6 | | 55 5 | 22 0 |
| RICE (milled equivalent) | | | | | | | | |
| Asia | 31 Dec | 0 2 | 0 7 | 1 4 | 1 3 | | 21 3 | 3 1 |
| United States | 31 July | 0 1 | — | 0 1 | 0 2 | 0 7 | 1 5 | 0 6 |
| Mediterranean | 30 Sept | — | — | — | 0 2 | 0 3 | 1 3 | 0 4 |
| TOTAL ALL EXPORTERS | | 0 3 | 0 7 | 1 5 | 1 7 | | 24 2 | 4 1 |
| COARSE GRAINS [c] | | | | | | | | |
| United States | 1 July [d] | 25 1 | 18 2 | 24 5 | 28 6 | 33 5 | 104 0 | 3 2 |
| Canada | 1 Aug | 2 8 | 3 6 | 5 0 | 5 5 | 3 3 | 12 8 | 3 1 |
| TOTAL 2 MAJOR EXPORTERS | | 27 9 | 21 8 | 29 5 | 34 1 | 36 8 | 116 8 | 6 3 |
| BUTTER | | | | | | | | |
| United States | Dec | 0 01 | 0 03 | 0 13 | 0 17 | | 0 70 | — [e] |
| CHEESE | | | | | | | | |
| United States | Dec | 0 10 | 0 11 | 0 20 | 0 25 | | 0 57 | 0 01 |
| DRIED SKIM MILK | | | | | | | | |
| United States | Dec | 0 04 | 0 08 | 0 23 | 0 07 | | 0 46 | 0 01 [e] |
| LINSEED OIL [f] | | | | | | | | |
| United States | 1 July | 0 42 | 0 41 | 0 37 | 0 29 | | 0 31 | 0 10 |
| Argentina | 1 Dec | 0 22 | 0 30 | 0 23 | 0 05 | | 0 14 | 0 17 |
| TOTAL 2 COUNTRIES | | 0 64 | 0 71 | 0 60 | 0 34 | | 0 45 | 0 27 |
| LIQUID EDIBLE VEGETABLE OILS | | | | | | | | |
| United States | 1 Oct | 0 25 | 0 36 | 0 66 | 0 55 | | 2 07 | 0 39 |
| SUGAR (raw value) | | | | | | | | |
| Cuba | 31 Dec | 0 29 | 2 16 | 1 51 | 1 94 | | 5 45 | 5 05 |
| Other exporters [g] | 31 Aug [h] | 0 44 | 0 54 | 0 54 | 0 76 | | 4 96 | 2 01 |
| United Kingdom | 31 Aug | 0 58 | 0 56 | 0 88 | 1 48 | | 0 67 | 1 74 [k] |
| Other importers [i] | 31 Aug [j] | 2 37 | 2 40 | 2 24 | 2 69 | | 7 57 | 5 28 [k] |
| TOTAL | | 3 68 | 5 66 | 5 17 | 6 87 | | 18 65 | — |

*Note* Quantities shown include normal carry-over stocks

[a] Exports relate to July June and include wheat flour in terms of wheat.

[b] 8 1 in 1954

[c] Rye, barley, oats, maize Exports relate to July June

[d] Maize 1 Oct.

[e] Commercial exports only

[f] Including seeds in oil equivalent

[g] Belgium, Brazil, Denmark, Dominican Republic, Haiti, Peru, Philippines

[h] Denmark 30 Sept.

[i] Canada, France, Western Germany, Japan, Netherlands, Sweden, United States

[j] Japan 30 June Germany 30 Dec, United States 31 Dec

[k] Net imports

*Appendix C*

CALORIE SUPPLIES MEASURED AGAINST REQUIREMENTS

(*Calories* per capita per diem)

| | *Calories* | | | *Difference from requirements* | |
|---|---|---|---|---|---|
| *Country* | *Estimated requirements* | *Early post war* | *Recent* | *Early post war* | *Recent* |
| *Far East* | | | | | |
| Ceylon | 2 270 | 1 970 | 1 940 | − 13 2 | − 14 6 |
| India | 2 250 | 1 700 | 1 850 | − 24 4 | − 17 8 |
| Japan | 2 330 | 2 100 | 2 160 | − 9 9 | − 7 3 |
| Pakistan | 2 300 | 2 020 | 2 180 | − 12 2 | − 5 2 |
| Philippines | 2 230 | 1 960 | 1 960 | − 12 1 | − 12 1 |
| *Near East* | | | | | |
| Cyprus | 2 510 | 2 470 | 2,450 | − 1 6 | − 2 4 |
| Egypt | 2 390 | 2 290 | 2 380 | − 4 2 | − 0 4 |
| Turkey | 2 440 | 2 480 | 2 670 | + 1 6 | + 9 4 |
| *Africa* | | | | | |
| French N Africa | 2 430 | 1 920 | — | − 20 9 | — |
| Mauritius | 2 410 | 2 230 | — | − 7 5 | — |
| Tanganyika | 2 420 | 1 980 | — | − 18 2 | — |
| Union of S Africa | 2 400 | 2 520 | 2 650 | + 5 0 | + 10 4 |
| *Latin America* | | | | | |
| Argentina | 2 600 | 3 190 | 2 840 | + 22 7 | + 9 2 |
| Brazil | 2 450 | 2 340 | 2 360 | − 4 5 | − 3 7 |
| Chile | 2 640 | 2 360 | 2 490 | − 10 6 | − 5 7 |
| Colombia | 2 550 | 2 280 | — | − 10 6 | — |
| Cuba | 2 460 | 2 740 | — | + 11 4 | — |
| Mexico | 2 490 | 2 050 | 2 270 | − 17 6 | − 8 8 |
| Peru | 2 540 | 1 920 | 2 080 | − 24 4 | − 18 1 |
| Uruguay | 2 570 | 2 580 | 2 810 | + 0 4 | + 9 3 |
| Venezuela | 2 440 | 2 160 | 2 280 | − 11 5 | − 6 6 |
| *Europe* | | | | | |
| Belgium Luxembourg | 2 620 | 2 770 | 2 930 | + 5 7 | + 11 2 |
| Denmark | 2 750 | 3 160 | 3 280 | + 14 9 | + 11 9 |
| Finland | 2 830 | — | 3 100 | — | + 11 0 |
| France | 2 550 | 2 770 | 2 795 | + 8 6 | + 11 0 |
| Greece | 2 390 | 2 510 | 2 520 | + 5 0 | + 10 5 |
| Italy | 2 440 | 2 340 | 2 595 | − 5 1 | + 10 6 |
| Netherlands | 2 630 | 2 960 | 2 910 | + 12 5 | + 11 1 |
| Norway | 2 850 | 3 140 | 3 120 | + 10 2 | + 10 9 |
| Sweden | 2 840 | 3 120 | 2 980 | + 9 8 | + 10 5 |
| Switzerland | 2 720 | 3 150 | 3 075 | + 15 8 | + 11 3 |
| United Kingdom | 2 650 | 3 100 | 3 140 | + 16 9 | + 11 8 |
| Yugoslavia | 2,630 | — | 2 710 | — | + 10 3 |
| *USSR* | 2 710 | 3 070 | | + 11 4 | |
| *North America* | | | | | |
| Canada | 2 710 | 3 060 | 3 030 | + 12 9 | + 11.2 |
| USA | 2 640 | 3 130 | 3 070 | + 18 5 | + 11 6 |
| *Oceania* | | | | | |
| Australia | 2 620 | 3 160 | 3 040 | + 20 6 | + 11 6 |
| New Zealand | 2 670 | 3 250 | 3 310 | + 21 7 | + 12 4 |

*Appendix D*

## Per capita CONSUMPTION OF PULSES, FISH AND MEAT IN SELECTED COUNTRIES

(*Kilogrammes* per capita per annum)

| Country | Pulses and Nuts [a] | | Fish | | Meat | |
|---|---|---|---|---|---|---|
| | 1949/50 | 1953/54 | 1949/50 | 1953/54 | 1949/50 | 1953/54 |
| *Europe* | | | | | | |
| Austria | 3 | 3 | 2 | 2 | 30 | 44 |
| Belgium Luxembourg | 5 | 4 | 10 | 13 | 43 | 48 |
| Denmark | 3 | 6 | 18 | 13 | 65 | 60 |
| Finland | 2 | 2 | 13 | 12 | 28 | 30 |
| France | 7 | 6 | 10 | 9 | 57 | 71 |
| Greece | 16 | 19 | 10 | 9 | 12 | 15 |
| Ireland [c] | 3 | 2 | 2 | 3 | 53 | 53 |
| Italy | 11 | 14 | 6 | 7 | 17 | 19 |
| Netherlands | 5 | 4 | 9 | 9 | 29 | 36 |
| Norway | 4 | 3 | 49 | 40 | 35 | 34 |
| Portugal | | 7 | | 28 | | 15 |
| Sweden | 5 | 3 | 20 | 20 | 48 | 51 |
| Switzerland | 5 | 10 | 2 | 3 | 45 | 50 |
| Turkey | 9 | 14 | 2 | 3 | 14 | 18 |
| United Kingdom | 7 | 6 | 12 | 9 | 52 | 56 |
| Yugoslavia | | 9 | | 1 | | 21 |
| *North America* | | | | | | |
| Canada [g] | 7 | 6 | 7 | 6 | 70 | 76 |
| United States [h] | 7 | 7 | 5 | 5 | 76 | 78 |
| *Latin America* | | | | | | |
| Argentina [d] | 2 | 4 | 4 | 4 | 114 | 104 |
| Brazil [e] | 26 | 25 [b] | 3 | 2 | 39 | 27 |
| Chile [e] | 6 | 9 | 11 | 10 | 38 | 32 |
| Peru [e] | | 9 | | 4 | | 20 |
| Uruguay [f] | 3 | 2 | 2 | 2 | 106 | 96 |
| *Far East* | | | | | | |
| India | | 27 [b] | 2 | 2 | 2 | 1 |
| Japan | 2 | 5 | 15 | 18 | 2 | 3 |
| Pakistan [e] | 11 | 8 | 1 | 2 | 4 | 5 |
| Philippines | | 12 | | 15 | | 9 |
| *Near East* | | | | | | |
| Egypt | 14 | 10 | 3 | 3 | 10 | 11 |
| Israel | 5 | 6 | 17 | 14 | 18 | 11 |
| *Africa* | | | | | | |
| Southern Rhodesia | 4 | | 2 | | 25 | |
| Union of South Africa | 3 | 4 | | 4 | 43 | 41 |
| *Oceania* | | | | | | |
| Australia [e] | 2 | 4 | 4 | 4 | 112 | 111 |
| New Zealand [f] | 6 | 5 | | 6 | 106 | 103 |

[a] Includes cocoa beans
[b] Includes cocoa
[c] 1949, 1953
[d] 1948, 1954
[e] 1948, 1952.
[f] 1949, 1954
[g] 1948, 1949
[h] 1954

*Appendix E*

MILK CONSUMPTION AND PROPORTION CONSUMED AS LIQUID MILK

| Country | 1949/50 | | | 1953/54 | | |
|---|---|---|---|---|---|---|
| | Milk[1] | Liquid | | Milk[1] | Liquid | |
| | Kilogrammes per capita per annum | Kilogrammes per capita per annum | Per cent | Kilogrammes per capita per annum | Kilogrammes per capita per annum | Per cent |
| *Europe* | | | | | | |
| Austria | | | | 210 | 173 | 82 |
| Belgium Luxembourg | 150 | 98 | 65 | 175 | 109 | 62 |
| Denmark | 210 | 174 | 83 | 206 | 122 | 59 |
| Finland | 267 | 260 | 97 | 280 | 249 | 89 |
| France | 148 | 89 | 60 | 160 | 88 | 55 |
| Greece | 64 | 31 | 48 | 85 | 39 | 46 |
| Ireland [*] | 181 | 160 | 88 | 195 | 163 | 84 |
| Italy | 81 [*] | 47 | 58 | 100 [*] | 51 | 51 |
| Netherlands | 211 | 202 | 96 | 219 [*] | 194 | 86 |
| Norway | 333 | 254 | 76 | 310 | 196 | 63 |
| Sweden | 302 | 246 | 81 | 302 | 183 | 61 |
| Switzerland | 340 | 238 | 70 | 313 | 215 | 69 |
| United Kingdom | 210 | 154 | 73 | 205 | 152 | 74 |
| Yugoslavia | | | | 106 | 78 | 74 |
| *Near East* | | | | | | |
| Cyprus | 41 | 15 | 37 | | | |
| Egypt | | | | 55 | 42 | 76 |
| Turkey | 54 | 38 | 70 | 32 | 22 | 69 |
| *Far East* | | | | | | |
| Ceylon | 13 | 13 | 100 | 14 | 14 | 100 |
| India | 45 | 45 | 100 | 45 | 45 | 100 |
| *Latin America* | | | | | | |
| Argentina [*] | 165 | 106 | 64 | 155 | 95 | 61 |
| Brazil [*] | | | | 33 | 26 | 79 |
| Chile [*] | 68 | 48 | 71 | 100 | 65 | 65 |
| Uruguay [*] | 183 | 126 | 69 | 186 | 161 | 87 |
| *North America* | | | | | | |
| Canada [*] | 240 [*] | 206 | 86 | 240 | 194 | 81 |
| United States | 245 | 136 | 56 | 235 | 137 | 58 |
| *Oceania* | | | | | | |
| Australia [*] | 195 [*] | 138 | 71 | 180 | 128 | 71 |

[*] 1949 and 1953

[*] 1948 and 1954

[*] 1948 and 1952.

[*] 1949 and 1954.

[*] 1948-49

[1] Liquid milk and dairy products except butter

[*] Includes goat and ewe milk

[*] Includes whole milk standardized 2.5 per cent fat content.

## Chapter V

# EDUCATION

### INTRODUCTION

As far as can be judged from the crude measuring devices now available, education has been expanding in most of the world since 1950. There are approximately 550 million children 5-14 years old in the world today, the total number of boys and girls enrolled full-time in primary and secondary schools is probably about 300 million. On the basis of data from countries which represent about 90 per cent of the world's population, total school enrolment, in relation to child population, was about 18 per cent higher in 1954 than in 1950. In other words, the percentage of children enrolled in school has passed the half-way mark since 1950.

The rate of progress, however, is very uneven. Between seventy and eighty countries and territories, with more than 60 per cent of the world's population, are still some distance from the goal of universal primary education, only a few of these are likely to attain it by 1960, without an intensified effort. In twenty-odd countries and territories, with about 5 per cent of the world's population, less than one fifth of the children, aged 5-14, are in school, unless their rate of progress is markedly improved, some of these countries will not achieve universal primary education within this century or even within the next century. In several countries, the number of school-age children who do not receive any schooling is increasing, although in these same countries the percentage of school-age children enrolled in schools is also increasing. This apparent paradox is due to the fact that the rate of population growth is high, so that the total number of school-age children is increasing rapidly each year.

Increase in school enrolment does not necessarily mean [illegible]

[illegible] remained constant, improved, or declined in different countries. It is evident, however, that recent efforts to expand the quantity of education, meeting limitations of money, teacher supply, and school buildings, have led to an uneasy and shifting relationship between quantity and quality. Educational authorities, in countries with the highest enrolments as well as in countries with the lowest, have had to choose between leaving children out of school and adopting expedients they deplore—excessive numbers of pupils per teacher, teachers without proper education and training, double or triple shifts of pupils with curtailed hours of schooling. One could easily gain the impression from statements in educational journals and at conventions of educators that in countries at the highest educational levels the school system is in serious danger. These statements, it is true, are based on educational standards that have risen steadily in recent years. Nevertheless, the danger is real, in view of the increasing numbers of children and the competing demands on national resources. Constant warnings and appeals to public opinion appear to be necessary to secure for the schools adequate resources for healthy development.

At post-primary and higher levels, questions of quality and quantity of schooling are even more troublesome than at the primary level. The countries that are most highly developed economically have the largest post-primary and higher enrolments, and yet the needs for education in these countries have expanded even more rapidly than the supply of educated youth. Educators claim not only that the abilities of thousands of young people are wasted through their failure to obtain all the education they are capable of absorbing, but also that the post-primary schools do not impart an adequate cultural background and understanding of the world, and do not train enough specialists to meet the needs of a constantly changing and increasingly complex technological civilization.

Those among the less developed countries that have attained appreciable post-primary and higher enrolments have a somewhat different set of problems. The majority of the students demand education conferring a higher social status and an opening to white-collar jobs, the quality of the education is sometimes low, and the traditional white-collar occupations are already overcrowded. Meanwhile, there are extreme shortages in most of the skills and professions needed for economic and social development. As noted in the *International Survey of Programmes of Social Development*, many of these countries are trying to direct post-primary education into new channels—a task requiring difficult changes in the outlook of the youth and their families.

So far as inequalities in education, based on sex, ethnic group, urban-rural residence, or income are concerned—one of the most important subjects discussed in the *Preliminary Report on the World Social Situation*—there is not adequate statistical information to show whether major changes have taken place since 1950. Girls, rural children, and members of other unfavourably placed groups have unquestionably benefited from the general expansion of education. Moreover, there has been a remarkable recent increase in legislative and administrative measures intended to eliminate discrimina-

tion; very few countries now cling to an openly discriminatory policy.[1] Such measures will no doubt have an important long-range effect, but there is at present little quantitative evidence indicating whether, over the past four or five years, the unfavourably placed groups have come significantly closer to equality. A partial exception may be made for the schooling of women; in many countries and territories, the gap between male and female enrolment is clearly narrowing, and statistics for literacy by age-groups indicate that this trend has been widespread over a long period. The following sections will examine, in some detail, the world educational situation as to literacy of the population, trends in school enrolment and the development of certain cultural activities closely related to education.

## Literacy and educational level

Literacy of the population is a useful indicator of the relative development of a country as a result of its educative process in the past. Comparatively recent literacy data from population censuses or sample surveys are now available for about seventy countries. Somewhat complete or incomplete data are available for another forty countries. This information, supplemented by estimates for the remaining countries, has made it feasible to attempt an assessment of the world literacy situation at the present time.[2]

In terms of a minimum criterion of literacy, such as is implied in the usual census question "Can you read and write?", it has been estimated that rather more than half (55-57 per cent) of the world's population fifteen years old and over are now literate. The level of adult literacy among the different geographical regions of the world[3] is undoubtedly highest (more than 95 per cent) for Northern and Western Europe, Central Europe, Northern America (Canada and the United States) and Oceania (Australia and New Zealand). The USSR is estimated by the Government today to have reached practically complete literacy, like the countries mentioned above. Southern Europe, with about 80 per cent literacy, follows. Middle and South America (estimated at 56-60 per cent) and East Asia (50-55 per cent) are near the average level of literacy estimated for the world population. The regions of South East Asia (estimated at 30-35 per cent) and South West Asia (20-25 per cent) fall well below the world average, though they still show up better than South Central Asia and the whole of Africa (15-20 per cent).

These average estimates, however, tend to cover up wide variations in the literacy status of individual countries (in the same way as national average rates cover up local variations within a country). A better perspective may be gained by a grouping of countries (and territories) according to their estimated literacy rates, for example, in four broad ranges, as follows:

| Estimated literacy rate | Number of countries | Countries with 200,000 or more inhabitants |
|---|---|---|
| 80 per cent or higher | 56 | 31 |
| 50-80 per cent | 47 | 33 |
| 20-50 per cent | 37 | 27 |
| Below 20 per cent | 60 | 46 |
| Total | 200 | 137 |

Thus it is seen that nearly one third of all the countries have estimated literacy rates below 20 per cent; almost exactly one third of the countries with 200,000 or more inhabitants have such low rates. Slightly more than half of all countries have estimated literacy rates of 50 per cent or more; the proportion is less than half if the smaller countries are excluded.

Table 1 gives the distribution of 137 countries, each with 200,000 or more inhabitants, by geographical region and level of literacy. It shows that, of the thirty-one countries in the highest literacy group, all except two (Israel and Japan) are found in the Americas, Europe, USSR and Oceania. The next group of thirty-three countries are mostly in Middle and South America and in Southern Europe. The last two groups of countries are, as expected, concentrated in Asia and Africa, with a few in Middle and South America and Oceania.

Statistics on literacy derived from censuses of population are available only at infrequent intervals, hence it is not possible to measure short-term progress by this indicator. Analysis of census data on literacy since 1900 shows that, unless a country's illiteracy rate was reduced at an average rate of 10 per cent or more per decade, the absolute number of adult illiterates tended to increase. This was owing to the rapid population increases that characterize most of the countries with high illiteracy.

*Table 1*

Distribution of 137 countries and territories with 200,000 or more inhabitants by geographical region and level of literacy*

| Region | Number of countries with literacy rates: 80 per cent or higher | 50-80 per cent | 20-50 per cent | Below 20 per cent |
|---|---|---|---|---|
| Northern Africa | — | — | 1 | 9 |
| Tropical and Southern Africa | — | 3 | 10 | 16 |
| Northern America | 2 | — | — | — |
| Middle America | 1 | 9 | 5 | 1 |
| South America | 3 | 6 | 3 | — |
| East, South Central and South East Asia | 1 | 6 | 5 | 12 |
| South West Asia | 1 | 1 | 3 | 6 |
| Europe | 19 | 7 | — | — |
| Oceania | 3 | 1 | — | 2 |
| USSR | 1 | — | — | — |
| Total | 31 | 33 | 27 | 46 |

* For literacy rates by country see appendix A, column VI.

[1] These measures are discussed in detail in the *Study of Discrimination in Education*, United Nations, E/CN.4/[illegible], prepared by a special rapporteur for the Sub-Commission on Prevention of Discrimination and Protection of Minorities.

[2] For a detailed study of the world situation around 1950 regarding literacy and illiteracy, see UNESCO, *World Illiteracy at Mid-Century* (scheduled for publication in 1957).

[3] For definitions of these geographical regions, see *Demographic Yearbook 1955* (United Nations publication, Sales No. 1955.XIII.6), p. 12.

Where the illiteracy rate was reduced by 25 per cent or more over a ten-year period, then the absolute number of illiterates in the population was found to be definitely decreasing [4]

As the countries approach the goal of universal literacy, a crude index of minimum literacy is no longer very useful A more meaningful measure of the educational level of a population would be the proportion having completed a given number of years of education Such data on the educational level of the population are becoming increasingly available from national censuses The median number of years of schooling completed by the adult population of a country is also potentially a valuable indicator of its educational level, particularly in the case of countries in which literacy has become practically universal It has been proposed that this indicator should be expressed in the form of a median number of years of schooling completed by the population twenty-five years of age and over [5] Examination of the information now available, however, has proved dis

appears that this indicator will not become internationally useful before the 1960 round of censuses

### Trends in school enrolment

One of the best quantitative indicators of a country's educational level would be the percentage of school age children actually attending school However, in spite of considerable improvements since 1950 in the inter national collection and analysis of educational statis tics,[7] it is not yet possible to present such percentages in internationally comparable form for the individual countries In the first place, there is no uniform defini-

year age group—but even here there is no information for a great many countries on the actual size of this age-group, only estimates of its probable range as a percentage of the total population Furthermore, information is not generally available on the actual age distribution of children attending and not attending school (except during a census year) [8] Finally, current school statistics available from most countries at present refer to enrolment, not attendance In countries with enforced systems of compulsory education, the difference between enrolment and attendance figures is naturally very small Most of the other countries for which data on both enrolment and attendance are available show the latter to be between 75 and 90 per cent of the former In some countries, and particularly in rural schools, the gap is even much wider

Instead of directly indicating changes in the percentage of children in school, appendix A indicates changes in educational levels since 1950 indirectly, it does this by presenting (in column II), for different periods of time, the percentage of the total population of each country enrolled in full time educational institutions (primary, secondary and technical), excluding the pre school and the higher levels, and at the same time it gives (in column I) the known or estimated percentage of the total population that falls in the 5-14 year age group In general, the more closely the figure in column II approaches the figure in column I, the higher the country's educational level It will be noted that in a very few countries, the percentage of children and youths enrolled in school (column II) is larger than the percentage between the ages of five and fourteen (column I) This indicates that compulsory schooling has been extended into the secondary level, and goes well beyond the age of fourteen

The percentage of the total population enrolled in primary schools has been shown separately in order to give some indication of its importance in total enrolment, in most countries it coincides with the compulsory period This percentage also gives a rough indication of whether or not a country has attained universal primary schooling A primary enrolment ratio of 60 per cent or more of the 5 14 year age group usually indicates that a country has reached this goal [9]

Appendix A enables the reader to note any outstanding changes and to make a very rough comparison of countries at differing educational levels without, it is to be hoped, encouraging him to place excessive confidence in such comparisons Countries with low school enrolments usually also have inadequate statistics In countries that have not recently taken a population census the percentages given for child population are subject to particularly wide margins of error

The presentation of percentages of total population enrolled in primary, secondary and technical institutions may also help the reader to see how greatly the educational burdens of countries differ according to the age composition of their populations Some countries (e g, Austria, Norway, Switzerland) may have universal pri mary education and extensive secondary and technical education with less than 14 per cent of their population

[4] See UNESCO, *Progress of Literacy in Various Countries* Monographs on Fundamental Education—VI (Paris 1953), pp 168 178

[5] See *Report on International Definition and Measurement of Standards and Levels of Living* (United Nations publication Sales No 1954 IV 5) p 33

[6] Statistics on duration of schooling completed, derived from censuses conducted around 1950 are to be reproduced in the United Nations *Demographic Yearbook 1956*

[7] See UNESCO *World Survey of Education* (Paris 1955) chap III

[8] Statistics on school attendance by age and sex, derived from censuses conducted around 1950, are to be reproduced in the United Nations *Demographic Yearbook 1956*

[9] The purpose and shortcomings of this approach to inter national comparison of educational levels were discussed in chapter VI of the *Preliminary Report on the World Social Situation* (United Nations publication, Sales No 1952 IV 11) It should be kept in mind that in most countries the normal school age

different countries, in some countries the two stages overlap and in others the distinction has been abandoned, and there is a unified school system up to the higher level

enrolled in schools, others, in which children form a much larger proportion of the total population, may have up to 18 or 20 per cent of their total population enrolled in such schools and still leave appreciable numbers of children without any schooling whatsoever

The rate of progress achieved by a country in raising its level of school enrolment in recent years can best be indicated by an average annual rate, since the data for different countries cover periods of varying duration Table 2 classifies countries roughly according to average

*Table 2*

DISTRIBUTION OF COUNTRIES AND TERRITORIES BY ESTIMATED RATIO OF PRIMARY, SECONDARY AND TECHNICAL SCHOOL ENROLMENT TO THE SIZE OF THE 5 14 YEAR AGE GROUP, AND BY AVERAGE ANNUAL INCREASES IN THIS RATIO SINCE 1950

| | *Average annual increase in ratio of enrolment to 5-14 year age-group less than 0.5 percentage points* | | *Average annual increase equal to 0.5 to 1 percentage points* | *Average annual increase equal to 1 to 2 percentage points* | *Average annual increase equal to 2 to 3 percentage points* | *Average annual increase equal to 3 or more percentage points* | *No information as to recent changes in ratio of enrolment to 5-14-year age-group or enrolments for recent years known not to be comparable* |
|---|---|---|---|---|---|---|---|
| *School enrolment equal to 80 per cent or more of 5-14 year age-group* | Australia<br>Austria<br>Belgium<br>Canada<br>Finland<br>France<br>Germany (Fed Rep)<br>Greece<br>Hawaii<br>Hungary<br>Iceland | Ireland<br>Japan<br>Luxembourg<br>Netherlands<br>New Zealand<br>Norway<br>Ryukyu Is<br>Switzerland<br>United Kingdom | British Guiana | Denmark<br>Guadeloupe<br>Surinam<br>Trinidad<br>United States | Argentina<br>Cyprus<br>Sweden | Chile<br>Czechoslovakia<br>Israel<br>Puerto Rico | Malta<br>Martinique<br>USSR |
| *School enrolment equal to 60 to 80 per cent of 5 14 year age-group* | Albania<br>Barbados<br>Bulgaria<br>Fiji<br>Jamaica<br>Italy | Philippines<br>Poland<br>Reunion<br>Spain<br>Thailand<br>Yugoslavia | Ceylon<br>Singapore | Costa Rica<br>Panama | Basutoland<br>China Taiwan | Jordan<br>Lebanon<br>Mauritius<br>Paraguay | Germany, East<br>Korea, South<br>Romania<br>Uruguay |
| *School enrolment equal to 40 to 60 per cent of 5 14 year age-group* | Cuba<br>Dominican Republic<br>Malaya Federation of | | Papua<br>Peru<br>Turkey | Ecuador<br>Mexico<br>Portugal<br>Venezuela | Egypt<br>El Salvador<br>Morocco (F Sp Zone) | Gold Coast<br>Hong Kong | Mongolian P R<br>Southern Rhodesia<br>Union of South Africa |
| *School enrolment equal to 20 to 40 per cent of 5 14 year age-group* | Guatemala<br>Kenya<br>Northern Rhodesia<br>Nyasaland | | Belgian Congo<br>India<br>Iran<br>New Guinea (Aust)<br>Pakistan | Algeria<br>Bechuanaland<br>Brazil<br>British Borneo<br>Colombia<br>Honduras<br>Laos<br>Madagascar<br>Nigeria<br>Swaziland<br>Syria<br>Togoland (Fr)<br>Tunisia<br>Uganda<br>West New Guinea | Cambodia<br>Cameroons (Fr)<br>Iraq<br>Ruanda Urundi | Bolivia<br>Burma<br>China mainland<br>Haiti<br>Indonesia<br>Port. India | Nicaragua<br>South West Africa |
| *School enrolment less than 20 per cent of 5 14 year age group* | Afghanistan<br>British Somaliland<br>Gambia<br>Saudi Arabia<br>Sierra Leone<br>Somaliland (It)<br>Sudan | | Aden C and P<br>Fr Eq Africa<br>Fr West Africa<br>Port Guinea<br>Timor (Port.) | Liberia<br>Mozambique<br>Tanganyika<br>Zanzibar | | | Angola<br>Eritrea<br>Ethiopia<br>Libya<br>Nepal |

annual rates of increase,[10] on the basis of data present-

*School enrolment trends in the economically more developed countries*

It will be noted that, as in the case of literacy rates (table 1), the highest enrolment ratios are found mainly among countries of Northern, Western, and Central Europe, Northern America, Oceania, and the USSR, while, with certain exceptions, these are also countries with little or no increase in enrolment ratios In most

to the 5-14 year age group There have, however, been important changes in the relation of school enrolment to the *total* population, deriving from changes in the size of the 5 14 year age group itself

In most of the countries of *Northern and Western Europe*, together with *Australia, Canada, New Zealand, and the United States*, the outstanding change in the educational situation has been a rapid expansion in *primary* school enrolment, deriving from an important increase in birth-rates a few years previously Birth-rates in these countries generally reached a low point between 1939 and 1941, climbed slowly until 1945, and jumped to a peak round 1947[12] The bulge" of children born during the middle and late 1940's began to enter primary schools around 1950 or soon after Most of the economically developed countries accordingly have experienced a severe strain on the capacity of primary school buildings and teachers[13]

Since birth rates generally declined to some extent after 1947 (except in Canada and the United States), the countries in question anticipate a somewhat slower rate of increase in primary enrolment during the next few years, while the impact of the large age-groups is now beginning to be felt at the post-primary level and in a few years will affect the universities and other institutions of higher learning The years of maximum pressure at different levels of schooling, of course, are not the same in different countries In the United Kingdom, according to an official analysis, the greatest pressure in the primary schools is anticipated for 1956-57 and in the secondary schools from 1960 onward[14]

Up to the present, or until very recently, the post-primary schools in the countries under discussion have been receiving the relatively small age-groups born during the 1930's, and in some cases post primary enrolment has declined in relation to total population, as a result of previously declining birth rates More often, however, educational policies and popular demands for more education have offset this factor In France, for example, in 1954 55, " the bulge in the birth rate had not yet affected general and vocational secondary schools, *but enrolments nevertheless rose in both types of school*, as a result of the general tendency for parents to keep their children at school beyond the primary stage The percentage receiving general secondary education is estimated at 14 per cent, as compared with 7 per cent before the war Vocational secondary enrolments increased at an even greater rate '[15]

Recent trends in school enrolment in the USSR have been quite different from those just considered In the first place, the children passing through primary school during the period under review were born either during the war years, ' when the birth-rate dropped considerably owing to the wartime conditions, especially in territory occupied by the enemy and in the regions close to the front ',[16] or during the immediate post-war period, when birth rates apparently remained low Consequently, there was a remarkable slump in primary enrolment in the USSR rather than a bulge as in Western

[10] The rates are expressed in terms of average annual increase in percentage of the five to fourteen year age-group enrolled in schools The results it will be noted are quite different from those that would be obtained by other methods of computing

of progress in a country where enrolment is so small that doubling the number of pupils means only a small increase in the percentage of school age children enrolled in school

tion of an unreal degree of exactitude to the positions of the individual countries but it produces an injustice to the countries that are close to a dividing line the differences between countries falling into neighbouring classes are in many cases not large enough to be statistically significant Furthermore it is possible that apparent high rates of progress are in some cases due to changes in the school systems or methods of computing " enrolment " that are not revealed in internationally reported statistics

[12] See chap II In France the crude birth rate climbed from 13 1 per 1,000 population in 1941 to 23 8 in 1947, then declined

then the rate has remained nearly level In the countries not directly involved in the Second World War the low and high points came somewhat earlier in Sweden the 1935 39 average rate was 14 5, the rate for 1944 20 6 and the rate for 1954, 14 6

[13] In some countries the shortage of primary school teachers is stated to have been intensified by the fact that the classes now

[14] United Kingdom National Advisory Council on the Training and Supply of Teachers *First Report* (London H M Stationery Office 1951)

[15] UNESCO International Bureau of Education, *International Yearbook of Education* vol XVII 1955, Publication No 169 (Paris Geneva), p 158

[16] *Narodnoe Khozyaistvo SSSR*, 1956, p 221

Europe and Northern America; the number of children in grades I-VII of the general schools fell from 31 5 millions in 1950 to 22 millions in 1955

At the same time that the pressure on the lower grades decreased, however, the USSR embarked on far-reaching plans for the extension of compulsory schooling from seven years to ten years Ten-year schooling has now been made compulsory in the capitals of the Union republics, the provincial capitals, and the main industrial centres, and is being introduced by stages into smaller towns and rural areas The process is to be completed by 1960 Enrolment in grades VIII-X of the general schools has already more than tripled, increasing from 1,836,000 in 1950 to 6,159,000 in 1955, and thus offsetting to a considerable extent the drop in primary enrolment This increase has necessitated a change in the purposes of the ten-year schools Previously, most of the students who completed the tenth year went on to higher education, at present, the majority go directly into industry or agriculture, with some part-time schooling or vocational training Nevertheless, during the period 1950-55, enrolment at specialized intermediate educational institutions above the tenth grade increased from 1,117,000 to 1,674,000 (excluding correspondence pupils), and enrolment at higher institutions increased from 845,000 to 1,228,000

By 1950, the Soviet birth-rate had returned to a level slightly above the United States birth-rate and well above the rates of Western European countries, and primary enrolments will probably soon show the impact of the larger age-groups The approaching bulge in the lower primary grades will coincide with a continuing increase in the secondary grades resulting from the extension of compulsory secondary enrolment into the rural areas, this will no doubt necessitate a sizable expansion of investment in education The fact that in 1960 the small age groups born during wartime will be entering higher education and the labour market may increase the strain on the school system, since new teachers for the larger enrolments will have to be drawn from these small age-groups, the members of which will be in heavy demand from other sectors of the national economy

The absolute numbers of children enrolled in primary schools in most of the countries of *Central Europe* [17] have also shown a downward trend, except for Czechoslovakia, as a result of a decline in birth-rates in the middle 1940's associated with war and immediate post- [illegible] ral Republic [illegible] om 6 6 mil [illegible] Austria and Poland primary enrolments also declined, while in Hungary they remained practically stationary Post-primary enrolments in these same countries have increased to some extent, except in Poland where the war- [illegible] earlier than [illegible] in occupa- [illegible] y schools

While the absolute number of post-primary pupils in Poland declined from 733,000 in 1949 to 650,000 in 1954, the percentage of the age group 14-17 enrolled in school increased from 40 7 to 44 8 [18] In Hungary, in contrast to other centrally planned European countries, there was during the period under review a reversal of the policy of increasing post-primary (as well as higher) enrolments Following an increase from 92,000 in 1950 to 130,000 in 1953, post-primary enrolments were cut to 119,000 in 1955, as a result of "the reduction in first-year enrolments at the specialized secondary schools which have had high enrolments in recent years and have thus satisfied the demand of certain fields of the national economy for workers" [19]

Most of the countries of *Southern Europe* [20] have in general somewhat lower enrolment figures than the countries discussed up to this point and, with the exception of Portugal, their enrolment ratios have shown no significant increases since 1950 A long term population trend reducing the size of the school age population in relation to the adult population that must support it has lightened the burden of providing universal primary education in the majority of these countries As a result of a decline in birth-rates between the 1930's and the late 1940's, the 5-14 year age-groups in Italy, Greece, Portugal, and Spain have not only declined in percentage from levels characteristic of the less developed countries (21-23 per cent in the 1930's) to levels only slightly higher than the average for Northern and Western Europe (17-19 per cent), but have also fallen in absolute numbers (in Italy from 8 8 millions in 1936 to 8 1 millions in 1947 and 7 9 millions in 1951) In Yugoslavia, as in the USSR, school enrolment appears to have been affected by a wartime slump in birth-rates, but these rates have since 1948 returned to a level far above those recorded by the other Southern European countries, and a corresponding rise in school enrolments can be expected

### *School enrolment trends in the economically less developed countries*

Appendix A and table 2 reveal that a considerable number of countries and territories in Middle and South America and in Asia, and a few in Africa, have attained relatively high levels of school enrolment, having achieved or approached universal primary education, although they are faced with very large school age populations (their 5-14 year age-groups amount to 22-27 per cent of their populations, instead of 13-19 per cent, as in the countries of Europe, Northern America, Oceania, and probably the USSR)

It is an impressive fact that the majority of the underdeveloped countries and territories in these areas with a substantial school enrolment (equal to 60 per cent or more of their 5-14 year age group) have made appreciable advances in both primary and post-primary

[17] Included in this discussion are Austria Czechoslovakia, Germany, Hungary, and Poland Switzerland appears to follow the educational pattern of Western European countries considered above

[18] *Nowe Drogi*, Warsaw, January 1956, pp 96-97

[19] *International Yearbook of Education 1955, op cit*, p 192.

[20] Including Albania, Bulgaria, Greece, Italy, Portugal, Romania Spain and Yugoslavia.

enrolment ratios in the period under review, and that most of the others have held their ground In view of their rapidly increasing populations (in Ceylon from 7 5 millions in 1950 to 8 4 millions in 1954, in Costa Rica from 800,000 to 915,000 in the same period), this has meant very considerable increases in absolute figures for enrolments (in Ceylon from 1,353,000 in 1950 to 1,616,000 in 1954, in Costa Rica from 118,000 to 151,000 in the same period) In fact, merely in order not to lose ground, these countries normally have a problem of expanding their school systems at a rate as rapid as that of the economically developed countries when the latter are confronted by the unusual " bulge " described above

In nearly every case, the birth-rates of the economically under-developed countries with high enrolments have remained at constant high levels, while infant and child mortality rates have been dropping They can therefore anticipate no slackening in the pressure for continual expansion of their investment in education, even to maintain the present level of primary education, quite apart from the additional needs to improve the quality of the schools, to provide a longer period of schooling in rural areas, and expand post primary schooling

Puerto Rico appears to have attained a higher ratio of school enrolment to total population than any other country in the world without, even yet, providing a complete primary education for all children It now has a declining birth rate, the rate nevertheless remains high enough to ensure a continuing heavy educational burden for the foreseeable future

One country, Japan, which is unique in a number of its social and economic characteristics and difficult to classify, has for some years stood alone in having more than 22 per cent of its population in the 5 14 year age-group and at the same time enforcing nine years of compulsory schooling, with extensive post-primary schooling above the ninth grade Japanese school enrolment in recent years has been as large as the 5 14 year age group—a record equalled or surpassed by only a few of the highly industrialized countries with much smaller school age populations, and by a few small Caribbean territories, in which attendance is probably well below enrolment The dramatic decline in the Japanese birth rate following 1949 indicates that Japan's educational burden should grow considerably lighter in the near future [21]

Unlike the countries just described, the majority of the economically under developed countries and territories are still some distance from universal primary education These latter countries—to take a rather arbitrary dividing line—have less than 60 per cent of their 5-14 year age groups enrolled in school They include nearly two-thirds of the population of the world While all of them are economically under developed, they differ widely in the degree of " under-development ", and hence in the resources they are able to devote to education In practically all of these countries the 5-14 year age group comprises 22 27 per cent of the population, and there is no reason to believe that there have been significant changes in the age composition of their populations since 1950 It appears from table 2 that the great majority of them have made significant progress in raising their enrolment ratios during this period [22]

*Progress in secondary education relative to primary education*

During the period under consideration, secondary school enrolment has increased, on the whole, faster than primary school enrolment in countries at all levels of educational development, and particularly in countries at the higher level of educational development—although with the exceptions and qualifications indicated above resulting from changing age structure In the educationally advanced countries, legal measures to prolong compulsory education now bear mainly on the secondary school, but in most of these countries there has been a *de facto* lengthening of school life in advance of the *de jure* acceptance of the fact

Similar democratization of education appears to be at work in countries relatively less developed Any expansion of primary schooling sets in train an increase of secondary schooling and to this has been added the demand for trained personnel which has caused States like India to give high priority to extending secondary schools

The rapid growth of enrolments has had the natural effect of causing educational authorities to re-examine [illegible]

[illegible]

sification of the school grades, (*b*) the secondary school course has been more differentiated to answer the varying needs of the growing enrolment and the changing needs of the country The broad trend is towards a blurring of the distinction between " academic " and " vocational " education Countries as different as India and Sweden have decided to work towards comprehensive or multilateral secondary schools, in which the choices open to students will be vocational or pre-vocational as well as academic Another example of this trend is the effort in the USSR to introduce " polytechnical education " in the general secondary schools, in effect, this has amounted to a curriculum change which [illegible]

also In some instances the traditional final examination

[21] See chap II

[22] Even among the countries in the lower left hand group in table 2 (countries with less than 20 per cent of the estimated 5 14 year age group enrolled and with an average annual increase in the ratio of less than 0 5 percentage points) there have been appreciable increases since 1950 in numbers of children enrolled in schools and these increases, although they represent but a small percentage of the total school age population (see foot note 10) may provide a foundation for greater expansion in the future

that gives access to higher education has been relaxed or even abolished for certain secondary school branches In other cases the authorities have tried rather to raise the prestige of modern and technical courses by instituting new certificates for these studies (*d*) Technical education proper has received a great deal of attention from educators and administrators The main trends during 1950-54 seem to have been a lengthening of the courses of study and an increase in the range and variety of courses offered Although the problem has been frequently raised of how much general education should find a place in the technical curriculum, there is as yet too little information about steps taken to make general izations possible

## Availability of teachers

One might assume that, other things being equal, the fewer pupils per teacher the better the school system The number of pupils per teacher in primary school has thus been proposed as an (inverse) indicator of levels of education, and it is one of the easiest to obtain, since most countries publish the number of teachers as well as the number of pupils enrolled Other things are not equal, however The average primary teacher in one country may have only an elementary schooling or less,[23] with no

he may be a grac

institution The use of national totals may obscure wide differences between urban and rural schools, both in size of classes and in training of teachers [24] Furthermore, some ratios may be non-comparable because "pupil teachers", "monitors", etc, who actually conduct classes may not be counted among the teachers

The world average pupil teacher ratio is about 35 or 36 to 1 Pupil teacher ratios are in general somewhat below the world average in economically developed countries with universal primary schooling, and practically all of the extremely high ratios (forty or more pupils per teacher) are found in less developed countries That is to be expected It is more

very wide

and educ

oped countries have ratios much below the world average

The following table relates countries in the various regions to the number of pupils per teacher

*Table 3*

DISTRIBUTION OF 128 COUNTRIES AND TERRITORIES WITH 200 000 OR MORE INHABITANTS BY GEOGRAPHICAL REGION AND BY NUMBER OF PUPILS PER TEACHER IN PRIMARY SCHOOLS

| | *Fewer than 30* | *30-39* | *40-49* | *50 and over* |
|---|---|---|---|---|
| Northern Africa | 3 | 4 | — | — |
| Tropical and Southern Africa | 5 | 12 | 7 | 5 |
| Northern America | 1 | 1 | — | — |
| Middle America | 4 | 6 | 2 | 4 |
| South America | 2 | 7 | 2 | — |
| East South Central, and South East Asia | 3 | 11 | 3 | 4 |
| South West Asia | 5 | 3 | 2 | — |
| Europe | 12 | 10 | 3 | 1 |
| Oceania | 3 | 1 | 1 | — |
| USSR | 1 | — | — | — |
| TOTAL | 39 | 55 | 20 | 14 |

There is some evidence of improvement in recent years in teacher pupil ratios, although there has been no general trend of improvement in countries with the least advanced school systems

*Table 4*

MEDIAN PUPIL TEACHER RATIOS, AROUND 1950 AND 1954 FOR 69 SELECTED COUNTRIES BY RATIO OF PRIMARY ENROLMENT TO 5 14 YEAR AGE-GROUP

| *Primary enrolment ratio* | *No of countries covered* | *Median pupil teacher ratio in primary schools* | |
|---|---|---|---|
| | | *Around 1950* | *Around 1954* |
| 60 and over | (20) | 34 | 32 |
| 40-60 | (17) | 36 | 34 |
| Less than 40 | (32) | 37 5 | 38 |
| TOTAL | (69) | 36 | 34 |

It has already been mentioned that there is a wide range of pupil teacher ratios among countries at each level of educational development In some countries with long established systems of universal primary education (for example, Denmark, Ireland, and the Netherlands) there are as many as thirty six or thirty seven pupils per teacher Some educators believe that relatively large classes may not necessarily interfere with the learning process if the teachers are well qualified and teaching aids such as television and motion pictures are used effectively [25] It is probable, however, that very high ratios of pupils to teachers (e g, above 40) indicate

[23] In Ethiopia according to a recent statement by the Ministry of Education, only 10 per cent of the 2 000 Ethiopian teachers had completed an eight year elementary school education (Ethiopia Ministry of Education *Yearbook E C 1944-45 (1951 53)* (Addis Ababa 1954) Summarized in *Education Abstracts* No 51 December 1954)

[24] "It is tempting to assume that conditions are better when there is a pupil teacher ratio of say 20 1 than when the ratio is higher and this may be genera

such as

rat os in

many la

the fact t ... in many schools the ratio is relatively high" (Comment received from Dominion Bureau of Statistics 22 April 1955 on the *Report on International Definition and Measurement of Standards and Levels of Living*)

[25] A United States educator recently in a warning against the danger of employing poorly qualified teachers because of preoccupation with the idea of small classes stated that "the preponderance of evidence collected over 50 years

F

a serious depressing factor on the quality of education received by the average pupil Such ratios mean either that the individual classes are extremely large, or that the pupils attend in double shifts or on alternate days Most of the countries with such ratios are countries with large school-age populations and with school enrolments that are high in relation to other indicators of national social and economic development They are spreading their educational resources rather thin to reach as many children as possible The average qualifications of their teachers are probably low, and the pupil teacher ratios must be taken into account when assessing the meaning of their high enrolments It is noticeable, however, [illegible]

In economically less developed countries with relatively small school enrolments, low pupil teacher ratios presumably indicate that the schools have low attractive power, and that the demand for education has not yet exceeded the ability of the authorities to provide it In other cases, rapid expansion of the schools is resulting in shortages of qualified teachers, in spite of apparently satisfactory pupil teacher ratios (the latter may simply indicate very low standards for employment of teachers) [illegible]

In Eastern Nigeria, " the rate of expansion forced upon the Education Department by public demand has resulted in the virtual collapse of all standards " [27]

Shortage of teachers often coincides with shortage of classroom space A widely reported expedient to meet these combined shortages is the division of pupils into double or even triple shifts, a system which inevitably curtails the hours of instruction and increases the burden on the teacher Even countries with very high educational levels have not been able to eliminate double shifts, particularly in rapidly growing urban and suburban areas In the United States, according to the [illegible]

Federated Soviet Republic, the majority of the schools were reported in 1953 to be functioning with a two shift system, while some had three shifts [29] Although statistical evidence is lacking, double shifts appear to be common in the urban schools of the less-developed countries In Brazil, for example, " the shortage of schools in the larger towns made the introduction of a system of two or three shifts necessary Thus periods of instruction were reduced to four and a half and often to three hours a day " [30]

[26] The Nuffield Foundation and the Colonial Office, *African Education A Study of Educational Policy and Practice in British Tropical Africa* (Oxford, 1953), p 35

[27] *Ibid*

[28] Fourteenth Annual Report of the National Education Association, quoted in *The New York Times* 11 January 1956

[29] I Kairov, in *Uchitelskaya Gazeta*, 15 August 1953

[30] Joaquim Faria Goes Filho " Technological Development and Education in Brazil ", *Yearbook of Education*, 1954, pp 332-343

One result of the teacher shortage has been to increase the attention given to teacher-training institutions Most countries with high enrolments have been concerned more to increase the intake or to step up the output of existing training schools than to establish new ones Such measures as exemption from military service for prospective teachers (Netherlands) and large scale publicity campaigns for the profession (Canada, parts of the United States) have been typical By the end of the period under review the need for shortened courses seems to have passed and in the 1955 International Yearbook of Education several countries report that the crisis—for primary school teachers at least—is passing (e g , Denmark, New Zealand) [31] Curiously, this quantitative problem of the past decade has been accompanied by a trend in favour of lengthening the period of teacher training In its broadest form this is represented by the attempt to remove the traditional distinction between primary and secondary school teachers The practice of training primary school teachers at the university level is well rooted in the United States, and the years 1950-54 have seen similar movements elsewhere in Sweden an experimental institution has been set up in the University of Stockholm to train primary and secondary teachers together, and in the USSR a similar training is now provided for teachers in the seven-year schools A somewhat less vigorous form of the same trend is seen in the many countries which are cautiously lengthening the primary teacher course by one half year or one year

By 1954, it appears that the well developed school systems have had to turn their attention to the problem of secondary school teachers Almost all the countries report shortages in certain fields (notably mathematics, physics, chemistry, where industry offers greater inducements to graduates than does the teaching profession)

In countries less well developed, however, the problem of teacher supply still remains acute The period 1950-54 saw a considerable growth in the provision of teacher-training centres, such countries as India and Indonesia have invested much capital in this effort to expand, and a similar trend has appeared elsewhere in Asia, Africa and in parts of South America One cannot discover from the statistics whether the proportion of untrained teachers in these countries is decreasing, but it seems unlikely that the inevitably slower process of founding training centres has yet succeeded in catching up with the growth of school enrolment

### WASTAGE AND RETARDATION IN SCHOOLING [32]

In the countries without enforced compulsory schooling for a fixed period, a serious proportion of the children —particularly rural children—who enter school do not remain long enough to ensure permanent functional

[31] Nevertheless, the Canadian Education Association reports that for Canada, no improvement can be foreseen before 1960

[32] [illegible] before com- [illegible]

word " stagnation is used in the same sense

literacy This problem was discussed in the *Preliminary Report on the World Social Situation* [illegible] then authoritative state[illegible] [illegible] years of school In [illegible] it will be admitted [illegible] years of [illegible] literac[illegible] Nevert[illegible]

[illegible] pupils in class I in 1949 50 only 45 were studying in class IV in 1952 1953 [34]

At the conference on education in British Tropical Africa held in 1952, the West Africa study group suggested that ' a course of less than five years or one which ends before the age of eleven is unlikely by itself to have much permanent value ' [35] The East and Central Africa study group found that the great ma[illegible] many officials [illegible] they interview[illegible] mum to give t[illegible] literacy and that the child who does not get literacy is unlikely to get anything of value from his schooling ' The same study group concluded that ' the extent of the wastage in the schools of East and Central Africa is at present so great that it detracts very largely from the efficiency of the school system and leads to an immense waste of money and, what is even more important, of good human material This came to us as a shock, but it is so familiar a feature of the educational landscape that there is a danger of its being accepted as inevitable ' [36] To varying degrees this statement would probably apply to most of the countries and territories that have not yet attained universal primary schooling In Africa, Asia, and the Middle East, it appears that girls are much more likely to drop out after a very brief period in school than are boys

In general, where a high degree of wastage in the schools is tolerated, the explanation may be given that it is unavoidable in a period of transition, that while many children get little or no benefit from school attendance others do take advantage of the opportunity, which they would not have if educational resources were concentrated efficiently on a more [illegible] and that popular dem[illegible] the limited resources t[illegible] make any other cou[illegible] moving toward egalit[illegible] their educational resc[illegible] siderations of efficiency

Wastage is being combated in India and other countries by education of the parents and by the gradual extension of compulsion—sometimes limited to children who have actually enrolled in school In a few areas, year by year enrolment figures show encouraging progress In Tanganyika, for example, only 48 per cent of the pupils enrolling in grade I in 1947 reached grade IV in 1950 54 per cent of those enrolled in grade I in 1949 entered grade IV in 1952, while 68 per cent of those enrolling in 1951 reached grade IV in 1954 [37]

In many cases, however, the wastage does not result from a voluntary dropping out of school by the pupil In most of the countries without universal primary schooling rural primary schools either in law or in fact, offer four years or less of schooling It is impossible to estimate what proportion of the children leaving these schools can complete their primary education or the legally compulsory period at central or urban schools, in most cases, the proportion is probably very low In Mexico a country in which the school system is better developed than the average for the less developed areas, in 1952, out of 20 051 rural schools, 1,582 had only one grade, 7,286 had two, 7,604 had three, 2,494 had four, 455 had five and 630 had six [illegible] the second, the urban percentages in the first two grades were 32 3 and 20 0 [38] It is clear that in many other countries rural schools still fail to provide a complete primary education and a determined effort will be required to overcome this situation

A related problem, which combines with wastage to produce a concentration of enrolment in the first two or three grades, is retardation, or repetition of the same grade by a pupil The amount of retardation depends to a large extent on educational policy In some countries with universal primary schooling (e g , the United States) promotion from grade to grade is almost automatic at least up to the end of the primary course In others as in several Western European countries, up to 40 per cent of the pupils may repeat one or more grades before completing the primary course [39] In many of the countries without universal primary schooling the amount of retardation appears to be large, although data are lacking The primary school curriculum is frequently rigid and bookish many of the teachers are poorly qualified and also unprepared [illegible] intellectual [illegible] of the ch[illegible] find it ha[illegible] and prom[illegible] usually depends on the passing of an examination at the end of each school

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[33] India Ministry of Education *Progress of Education in India 1947 52* (Delhi 1953)

[34] *Education in India 1952 53* (Delhi 1956)

[35] The Nuffield Foundation and the Colonial Office *op cit* p 19

[36] The Nuffield Foundation and the Colonial Office *op cit* p 77

[37] "The [illegible] [illegible] on from Non Self [illegible] Territories, United Nations A/AC.35/L.224

[38] Mexico *Anuario Estadistico* 1953 For detailed information on duration of primary schooling and enrolment by grades see UNESCO *World Survey of Education* (Paris 1955)

[39] UNESCO *Education and Mental Health* (Paris, 1955) p 113

[40] UNESCO *Compulsory Education in the Arab States With Special Reference to the Cairo Conference December 1954* (Paris 1956) p 56

year "Often more than one year elapses before the child can adapt himself and begin to make reasonable progress "[41] In rural schools, in which one teacher handles several grades in a single room, the practical importance of promotion, in relation to what the child learns, probably depends mainly on the teacher However, where attendance is not compulsory, non-promotion may discourage the child or his family and cause him to drop school altogether Repetition of grades inevitably causes some wastage which countries unable to provide universal schooling can ill afford Improvement in this situation depends partly on the securing of better qualified teachers, partly on reforms in the curriculum and in the system of promotion by examination

### Enrolment in higher institutions

Appendix A presents higher enrolment in relation to total population (column V) Since the age span of students in higher institutions is very wide and not at all uniform for different countries, no effort has been made to relate such enrolment to any specific age-group By higher education is meant all types of education above the secondary level, hence not only universities but many kinds of colleges and technical schools are included Statistics for higher education are often non-comparable from country to country or even within the same country for different years, owing to the inclusion or exclusion of certain types of specialized schools or of different kinds of enrolment—full time or part time, regular or special Furthermore, students in increasing numbers cross national frontiers in their search for education [42] Many of the dependent territories provide statistics on the number of their students in higher institutions abroad, but in most other cases, foreign students are included in the statistics of the country in which they are studying and not in the statistics of their country of origin

The enrolment ratios do roughly indicate, however, a general upward trend in higher enrolment in the countries at low educational levels, and a rather inconsistent pattern of increases and decreases in the countries at high levels, with Japan and the USSR showing the largest increases (nearly 50 per cent in both cases) Table 5 shows the upward trend in the countries at low educational levels, as well as the wide gap in levels of higher enrolment between these countries and the countries at high levels of general education

The *International Survey of Programmes of Social Development* (pp 83 85) pointed to the wide differences in present day national policies for higher education "Higher education" includes training for the traditional learned professions of medicine and law, training for engineering and the newer technological specialities and applied sciences, general academic instruction in "liberal arts", "arts and sciences", "humanities", etc, other forms of advanced instruction, consisting mainly of professional or vocational training in education

*Table 5*

MEDIAN ENROLMENT IN HIGHER EDUCATION PER 100 000 POPULATION AROUND 1950 AND 1954, FOR SIXTY NINE COUNTRIES, BY LEVEL OF LITERACY

| Level of literacy | No of countries covered | Median enrolment in higher education per 100 000 population: Around 1950 | Around 1954 |
|---|---|---|---|
| Population 80 per cent or more literate | (25) | 359 | 351 |
| Population 50-80 per cent literate | (14) | 142 | 162 |
| Population 20-50 per cent literate | (19) | 83 | 107 |
| Population less than 20 per cent literate | (11) | 16 | 26 |
| TOTAL | (69) | 164 | 172 |

(teacher training) and commerce and business, and to a lesser extent in such fields as home economics and physical education Higher education in the "arts and sciences" (philosophy, history, literature, sciences, fine arts, classics, etc) does not have direct vocational or professional implications, except for those who plan to become teachers or scholars in these fields, it is intended to train the mind and permit the individual to prepare for life as an "educated man" In practice, however, college or university education of this type often becomes a prerequisite for the better-paid levels of government employment and may be sought more for this vocational purpose than for its intellectual stimulation

An examination of higher enrolments by subject in countries of different regions indicates—although very imperfectly—that these countries differ widely in the relative emphasis they give to the different types of higher education mentioned above, just as they differ in the total amount of higher education they provide [43] Some idea of the relative emphasis given to certain fields of higher education can be provided, for selected countries, by the following table, which shows roughly the percentage of students in higher education enrolled in law and medical sciences, on the one hand, and the percentage enrolled in engineering, technology and agriculture, on the other hand, about 1954

*In the countries of the European continent (excluding* the USSR and other centrally-planned countries) there appears to be a fair degree of emphasis on the traditional professions of law and medicine, and also on engineering, technology and agriculture In countries of Latin America and the Middle East, the concentration in law and medicine is especially high, accounting for more than half of all higher education students In some Latin American countries, enrolment in medical sciences,

[41] *Ibid*

[42] UNESCO, *Study Abroad* vol VIII (in press) reports 115 671 foreign students enrolled during 1954-55 in institutions of higher education of forty three countries

[43] See *World Survey of Education op cit* The international [illegible]

It appears also that in some countries this last category includes scientific instruction that is elsewhere considered technological

in relation to population size, exceeds that in certain of the more economically developed countries of Europe Middle Eastern countries tend to have an exceptionally large proportion of their higher education students enrolled in law, equalling or surpassing some of the more developed countries in the number of law students per 100,000 population, while showing a very small enrolment in engineering and technology

*Table 6*

ENROLMENT IN INSTITUTIONS OF HIGHER EDUCATION IN SELECTED COUNTRIES

| Country | Year | Number of students enrolled in institutions of higher education | Percentage enrolled in | | Enrolment per 100 000 of national population in | |
|---|---|---|---|---|---|---|
| | | | Law and medical sciences | Engineering and agricultural sciences | Law and medical sciences | Engineering and agricultural sciences |
| *America, Middle and South* | | | | | | |
| Argentina | 1954 | 143,342 | 56 | 19 | 426 | 144 |
| Brazil | 1954 | 65,633 | 54 | 14 | 62 | 16 |
| Colombia .. | 1954 | 11,996 | 55 | 17 | 53 | 16 |
| Peru . | 1954 | 20,351 | 25 | 12 | 54 | 26 |
| *America, Northern* | | | | | | |
| United States | 1954 | 2,301,884 | 6 | 10 | 84 | 135 |
| *Asia* | | | | | | |
| China: Mainland • | 1954 | 253,000 | 15 | 44 | 7 | 19 |
| China. Taiwan | 1954 | 13,162 | 13 | 44 | 20 | 66 |
| India | 1953 | 594,061 | 7 | 4 | 11 | 6 |
| Iran | 1955 | 9,981 | 59 | 10 | 28 | 5 |
| Japan • | 1954 | 475,132 | 18 | 16 | 95 | 86 |
| Syria . | 1954 | 5,023 | 56 | — | 71 | — |
| *Europe* | | | | | | |
| Austria • . | 1954 | 17,949 | 31 | 25 | 79 | 64 |
| Bulgaria . | 1955 | 31,067 | 19 | 43 | 78 | 177 |
| Finland . . | 1954 | 14,668 | 17 | 17 | 61 | 61 |
| France . | 1954 | 179,726 | 43 | 6 | 179 | 26 |
| Germany (Fed Rep) | 1954 | 116,081 | 41 | 21 | 97 • | 50 |
| Greece | 1953 | 17,975 | 34 | 11 | 78 | 25 |
| Ireland | 1954 | 7 284 | 27 | 18 | 66 | 44 |
| Italy • | 1953 | 137,789 | 42 | 12 | 123 | 35 |
| Netherlands • | 1953 | 27,987 | 35 | 22 | 93 | 58 |
| Norway | 1954 | 5,607 | 27 | 23 | 45 | 38 |
| Poland | 1954 | 143 305 | 21 | 49 | 113 | 262 |
| Portugal | 1953 | 14,563 | 35 | 14 | 59 | 24 |
| Spain | 1953 | 61,671 | 57 | 11 | 124 | 23 |
| Switzerland | 1954 | 15,684 | 34 | 15 | 109 | 46 |
| Yugoslavia | 1953 | 53 186 | 28 | 27 | 88 | 83 |
| *USSR* | | | | | | |
| USSRF | 1955 | 1,867 000 •<br>1,227,900 | 14 •• | 40 •• | 133 •• | 373 •• |

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1949 54, by the ...
*Communique on* ...
*Fulfillment of the* ... Statistical Bureau, October 1955 and pub-
*in 1954*, by the State Statistical ... (in Chinese) No 11, 1955, pp 181-189)

... *liche hörer*) only

• Excluding 81,128 non matriculated students (*fuori curso*)

• In degree granting institutions only

• Source *Kulturnoe Stroitelstvo SSSR Statisticheskу Sbornik*, 1956

• Including social sciences

• Including correspondence students

• Excluding correspondence students

• Including economics, physical culture, and sport.

• Including construction and rural economy

[illegible]

and sciences" courses taught at liberal arts colleges, which function in many ways as extensions of general secondary education, without specific vocational orientation The very high levels of over-all enrolment in higher education mean, however, that considerable numbers of professionals and technicians are also being produced, although doubts have been expressed as to whether their output will be adequate for future needs

The enrolments in mainland China, USSR and other centrally planned countries show extremely heavy concentrations in engineering, technology and agriculture, as may be expected in countries that gear their higher education closely to their economic development plans, there also appears to be heavy emphasis on mathematics and natural sciences in the universities proper of the USSR [44] Recent reports indicate rapid increases in enrolments in engineering and technology in the USSR, so that these enrolments now appear to exceed those in the United States, not only in absolute numbers but also in relation to total population size The changing structure of higher education in mainland China is shown by the following figures

*Enrolment (in thousands) of students in colleges and universities and technical institutes by fields of study* [a]

| | 1949/50 | 1952/53 | 1953/54 | 1954/55 |
|---|---|---|---|---|
| Total | 116 5 | 191 1 | 212 2 | 253 0 |
| Engineering | 30 3 | 66 6 | 80 0 | 95 0 |
| Agriculture and forestry | 10 4 | 15 5 | 15 4 | 15 9 |
| Public finance and economics | 19 4 | 22 0 | 13 5 | 11 2 |
| Political science and law | 7 3 | 3 8 | 3 9 | 4 0 |
| Medicine | 15 2 | 24 7 | 29 0 | 33 9 |
| Physical education | 0 3 | 0 3 | 1 1 | 1 9 |
| Science | 7 0 | 9 6 | 12 4 | 17 1 |
| Arts | 11 8 | 13 5 | 14 2 | 18 3 |
| Fine arts | 2 8 | 3 6 | 2 7 | 2 6 |
| Normal education | 12 0 | 31 5 | 40 0 | 53 1 |

[a] Source See footnote *a* to table 6

India has an unusually large percentage of higher enrolment in general academic courses and a very small percentage in other fields The Government of India has been particularly concerned with the related problems of a body of educated unemployed seeking state jobs and a shortage of technicians According to the most recent report of the Indian Ministry of Education, "despite introduction of new courses and subjects at different levels and considerable expansion of facilities for technical education and scientific research, no signs of diversion of students from humanistic courses were discernible" [45]

Most of the less developed countries, in fact, feel a need for more technologists, yet a number of them are also troubled by unemployment among graduates of the humanities or the traditional professions (especially law), accompanied by an unhealthy pressure for expansion of government employment

The higher institutions of learning often maintain—and jealously guard—a considerable degree of autonomy even when they obtain their support mainly from public funds Their relative emphasis on the different types of higher education derives from their historical traditions, the characteristics of the national culture, and the demands of the students, as well as from occupational considerations

Whether—and if so in what manner—the Government should seriously intervene to change this situation is a controversial subject It is controversial not only because intervention may raise questions of "academic freedom" and create opposition from students for whom certain kinds of education have a traditional status appeal, but also because there is no generally-accepted theory as to what, in the long run, is the proper distribution of higher education by subject field within a country of a given type The economically developed countries of Western Europe, Northern America and Oceania have added their engineering and technological [illegible] development, to education The [illegible] that today wish to modernize rapidly are faced, however, with a different type of situation, they may have to make a deliberate choice of fields upon which to concentrate limited resources, with a consequent sacrifice in other fields of higher education

COMMUNICATION AND CULTURAL ACTIVITIES

The extent of certain communication and cultural activities in a country is directly or indirectly related to the literacy level of its population and its educational development Among the indicators of this type available for a considerable number of countries are the following circulation of daily newspapers, consumption of newsprint, production and circulation of books, availability of radio (and television) Statistics on these [illegible] of the gains made in recent years

*Newspaper circulation and consumption of newsprint*

With respect to newspapers and their circulation, it must be recognized that the contents of a newspaper appeal to a variety of human interests, not necessarily related to education Furthermore, as stated in the *Preliminary Report*, in many of the areas in which schools and literacy campaigns are increasing the number of potential readers, weekly and monthly periodicals reach a much wider audience than dailies In Kenya, for example, there are only two daily newspapers, both in

[44] See *Kulturnoe Stroitelstvo SSSR Statistichesky Sbornik*, 1956

[45] *Education in India 1952 53, op cit*

[46] For recent detailed information, see UNESCO, *World Communications Press, Radio, Film Television*, 3rd ed, 1956, and R E Barker, *Books for All a study of international book trade* (Paris, UNESCO, 1956)

English and read mainly by Europeans, while there are thirty five weekly and monthly publications in ten African languages In general, however, there is not sufficient information available for international comparison on the circulation of periodicals other than dailies

Appendix B gives the circulation rates of daily newspapers in terms of copies per 1,000 population for an earlier year (generally 1949 or 1950) and for the latest year available The rates are closely correlated with levels of schooling and literacy, but there are important exceptions

A comparison of the earlier and the more recent circulation rates indicates that the gap between the economically developed countries and the less developed countries has narrowed, but only slightly In many of the former, the rates have declined somewhat, for reasons not entirely clear The competition of television, higher newspaper prices, and bulkier newspapers (making the individual less likely to purchase more than one) may account for this trend In a majority of the latter countries the rates have increased, countries with striking increases include Brazil, Ecuador, Honduras, Iraq, Syria, and Turkey

The disparity in *per capita* consumption of newsprint [47] continues to be even wider than the disparity in newspaper circulation, the average size of newspapers in countries with low newspaper circulations continues to be especially small World newsprint supply has risen considerably in recent years, but most of it has been absorbed by countries with previously high levels of consu [illegible] lead, [illegible] *per ca* [illegible] year, the United States took about 57 per cent of world output Meanwhile, at the other extreme, consumption in Haiti, Indonesia, and Iraq has remained nearly stationary at 0 1 kg *per capita* In Africa, Asia, and the Middle East as a whole newsprint consumption is about 0 4 kg *per capita* per year, and the figure would be much lower if it were not for relatively high consumption in a few countries in these regions, particularly Japan and the Union of South Africa In Latin America, it is 2 6 kg, in Europe, 5 5 kg in the USSR 2 2 kg The world average is 4 0 kg *per capita* Two-thirds of the world's population consume only about one tenth of the world output of paper

Since 1951, there has not been an absolute world shortage of newsprint, in relation to effective demand—that is, ability to pay current prices for it According to FAO data, thanks to the extensive research made in the past decade, it can be stated with confidence that the world as a whole possesses sufficient fibrous resources and the requisite techniques to sustain not only the present high demand but even any likely increase in the world's pulp and paper needs Nevertheless at the beginning of 1956 [illegible] summer of 1956 to reduce their number of pages [illegible] to eke out existing supplies of newsprint The world depends for newsprint almost entirely on imports from a handful of countries in Northern Europe and North America Newspapers in the less developed countries are at a particularly serious disadvantage in obtaining newsprint from these sources of supply They buy in relatively small quantities, from suppliers thousands of miles away and thus pay higher prices than those prevailing in the economically developed countries, while their revenues from purchasers and advertisers are relatively small Furthermore, newsprint imports compete with other essential imports for foreign exchange, and consumption depends partly on the priorities granted by the Government, as expressed in import duties or quotas

It is obvious that the rate of educational and cultural advancement in these countries is being slowed down by their inability to obtain enough newsprint and other paper at prices they can afford

Since 1950, problems of paper production, distribution, and consumption have received considerable attention from inter governmental organizations, and a number of country by-country surveys and forecasts have been prepared [48] A few countries have provided double forecasts for increases in "restricted demand" for newsprint (assuming a continuation of present high prices, shortages of foreign exchange, consequent restrictions on imports, etc ) and for "real requirements" Colombia, for example, forecast a restricted demand for 19,000 m t in 1955 and 25,800 m t in 1960, compared with real requirements of 22,700 m t in 1955 and 36,900 m t in 1960

At present, many of the less developed countries produce part of their paper requirements and hope to produce more Improved methods of obtaining paper pulp from domestic materials—tropical hardwoods, bamboo, sugar cane bagasse, straws, grasses, etc —make continued expansion possible Thus far, however, the domestic paper industries are mainly producing grades other than newsprint and printing paper It is difficult to produce newsprint economically without pulp from certain softwoods, rarely found in warm regions, although recent technological improvements make it feasible to use tropical hardwoods for this purpose Further research and considerable investments will be needed before domestic production can meet newsprint needs

### *Production and circulation of books*

[illegible]

[47] Consumption of paper other than newsprint used for printing and writing shows roughly similar disparities between countries.

[48] [illegible] *Experts on the Pulp and Paper Industry* Buenos Aires 19 October-2 November 1954 (United Nations publication, Sales No 1955 II G 4)

of a " book " or in the coverage of the national statistics For example, many countries include only publications above a given number of pages, while others make no distinction in their statistics between books and pamphlets Statistics for the United States are limited to the productions of the book trade and exclude all publications of the federal, state, and local governments as well as those of universities, churches, and other non-commercial organizations, while statistics for the USSR include all books and pamphlets for free distribution, amounting to about 40 per cent of the total production Furthermore, there is a considerable international trade in books Some relatively small countries (Netherlands, Switzerland, Spain) are among the major book exporters and send a high proportion of their output abroad A number of other countries (such as Australia, Canada, New Zealand, and most of the Latin American countries) depend to a large extent on the importation of books published in other countries using the same language, and thus their book production may be much smaller than their book circulation [49]

World production of books, estimated at 250,000 titles in 1954, has been increasing continually since 1950 Europe in 1954 is estimated to have published about 52 per cent of all book titles, resulting in a ratio of 3,000 inhabitants per title, as compared with 107,000 in Africa, 24,000 in Asia, 14,000 in Oceania, 13,000 in both North and South America, and 6,700 in the USSR (these estimates are subject to the above mentioned qualifications) In thirty-two countries for which statistics are available (including all major book producing countries except Mainland China), the 1954 production was about 206,000 titles, an increase of roughly 13 per cent over the 1950 production of 183,000 titles Among the ten largest producers (excluding China Mainland), each reporting more than 6,000 titles published in 1954, only India showed a decrease (of 22 6 per cent) in the number of titles published, and the Indian figures are estimates that may not be comparable The other nine leading countries showed the following percentage increases between 1950 and 1954 Italy, 3 per cent, France, 3 per cent, Netherlands, 7 per cent, United States, 8 per cent, United Kingdom, 12 per cent, USSR, 13 per cent, Federal Republic of Germany, 15 per cent, Poland, 28 per cent, and Japan, 52 per cent These ten countries accounted for nearly 60 per cent of world book production

Statistics on the circulation of books through public libraries are potentially valuable indicators of the extent to which the population of a country makes use of books, but such statistics are now available for only about a dozen of the educationally more advanced countries Among these countries, the United Kingdom shows the highest ratio of library book circulation to population for 1954 7,270 volumes per 1,000 inhabitants This [illegible]

Recent sample surveys of actual book readership carried out in a few countries also place the United Kingdom at the top 55 per cent of adults questioned in England were found to be reading books at the time of the more recent survey, in Australia 34 per cent, in Canada 31 per cent, in the United States 17 per cent [50]

It is clear that a very large number of countries and territories are making library services more effective and widely available [51] Typical systems—recently reported from countries as widely separated as Gold Coast, India, Indonesia, the Philippines, Poland, and Yugoslavia—are based on the co operation of central or district libraries, possessing large stocks of books, with small local village or factory libraries or reading rooms, the stocks of which are frequently renewed, some countries use mobile libraries (" bookmobiles ") or circulate books through the mail The fragmentary information available, however, indicates that few if any of the economically less developed countries have yet been able to make public libraries available to more than a small minority of the population India (a country particularly active in library expansion) " has a population of over 360 millions living in more than half a million towns and villages ", according to a recent address by the Minister of Education, " but possesses only 32,000 libraries In fact, many of them are libraries only in name, for they lack some of the essential prerequisites of any good library There is hardly one book for every fifty persons Even if we make allowances for the huge mass of illiterate people in the country, a literate adult in India reads on the average only one book a year " [52]

Brazilian statisticians have found a similar ratio of books to literate adults in that country, although the estimates are not strictly comparable In Brazil in 1950, 15,500,000 copies of books other than textbooks were published The literate population fifteen years of age and over in the same year was 14,900,000 leaving a ratio of just over one book per year per potential reader The author of the study found this ratio unexpectedly low [53]

Agencies for the production and distribution of reading matter adapted to the newly literate, or to the needs of peoples using vernaculars in which there is little reading matter, are now found in many parts of Africa and Asia, but there is little quantitative information on their output and readership [54]

[49] Detailed statistics and comments on book production and trade may be found in R E Barker, op cit

[50] *Science*, 27 April 1956, p 703

[51] Recent reports on the development of national library systems and some statistical data may be found in the UNESCO *Bulletin* [illegible] Nos 5, 6 and 7 (Paris)

[52] Inaugural address by Maulana Abul Kalam Azad, at the UNESCO Seminar on Development of Public Libraries in Asia [illegible]

[53] [illegible] tica, Ser- [illegible] *Serie C*

[54] See " Reading Material for New Literates (an interim report by the UNESCO Secretariat) " United Nations, A/AC 35/L.221, annex 4 to the *Report on Education in Non Self Governing Territories*, submitted to the seventh session of the Committee on Information from Non-Self Governing Territories

*Radio and television receivers*

The ratio of radios to population appears to have increased quite generally throughout the world between 1949 50 and 1954 (see appendix C) In the majority of the less developed countries for which data are available it has nearly doubled While the ratios in these countries are still relatively low, it appears that even in the isolated areas in less developed countries there is now at least one radio to a village This development, together with the extensive use of wired redistribution loudspeakers, has brought radio broadcasting within the reach of many more millions of people It means that even illiterate rural populations can no longer be isolated from a variety of ideas and appeals emanating from broadcasters within or without their countries who can address them in their own language

The available statistics show television receivers concentrated in a handful of countries (see appendix D) The situation here, however, is changing so rapidly that even 1955 statistics will be largely out of date by the time the present report is published

*Appendix A*

SCHOOL ENROLMENT IN RELATION TO POPULATION AND LITERACY RATES

GENERAL NOTE

This table is limited to countries and territories with populations of 200 000 or more

*Sources* For population data United Nations *Demographic Yearbooks* and *Population and Vital Statistics Reports* (Statistical Papers Series A). For school enrolment data Statistics computed by UNESCO and supplied to United Nations *Statistical Yearbooks Non-Self-Governing Territories Summaries and analyses of information transmitted to the Secretary-General*, annual reports of Trust Territories, national reports to the XVIIIth and XIXth International Conferences on Public Education (1955 and 1956) national statistical yearbooks

Percentages of population in the 5 14 year age group are derived from national censuses and from estimates prepared by the Population Branch of the United Nations Secretariat

For a number of reasons, the ratios of school enrolment to total population are not precisely accurate or precisely comparable school years in most cases do not coincide with calendar years the year appearing in the table is usually the calendar year in which the school year begins A school year running from September 1954 to June 1955, for example, is shown in the table as 1954 Enrolment figures, however, may represent the situation at the beginning or end of the school year, or the beginning or end of the calendar year The dates for population data (usually mid year estimates) do not coincide exactly or consistently with the enrolment dates

sary to use the same estimate for periods several years apart

Literacy rates (column VI), unless otherwise stated refer to the total population fifteen years of age and over All census data are marked by a letter "C" after the date All estimates are marked by "E" and are based on the latest information available to the secretariat of UNESCO

| Country | Year | I<br>Percentage of total population in 5 14 year-age group | II<br>Percentage of total population enrolled in primary secondary and technical schools | III<br>Percentage of total population enrolled in primary schools alone | IV<br>Number of pupils per teacher in primary schools for latest year known | V<br>Enrolment in institutions of higher education per 100 000 population | VI<br>Percentage literate of population 15 years of age and over |
|---|---|---|---|---|---|---|---|
| *Africa Northern* | | | | | | | |
| Algeria | 1950 | 24 27 | 4 5 | 4 1 | 37 (1950) | 52 (1950) | 17 9 |
| | 1954 | 24 27 | 5 5 | 4 9 | | 58 (1954) | (1948 C) |
| British Somaliland | 1950 | 22 27 | 4 | 4 | 23 (1954) | — | 1 5 |
| | 1954 | 22 27 | 5 | 5 | | — | (1950 E) |
| Egypt | 1951 | 23 25 | 7 8 | 6 8 | 39 (1955) | 192 (1951) | 19 9 |
| | 1955 | 23 25 | 10 3 | 9 7 | | 232 (1955) | (1947 C) |
| Ethiopia (Empire of) | | | | | | | |
| Eritrea * | 1950 | 22 27 | | 1 2 | | — | 1-5 |
| | 1952 | 22 27 | 1 4 | 1 2 | | — | (1950 E) |
| Ethiopia * | 1952 | 22 27 | 5 | 5 | 24 (1952) | 1 (1952) | 1 5<br>(1950 E) |
| Libya * | 1952 | 22 27 | 3 7 | 3 6 | 32 (1952) | | 5 10<br>(1950 E) |

*Appendix A* (continued)

| *Country* | *Year* | *I* *Percentage of total population in 5 14 year-age group* | *II* *Percentage of total population enrolled in primary secondary and technical schools* | *III* *Percentage of total population enrolled in primary schools alone* | *IV* *Number of pupils per teacher in primary schools for latest year known* | *V* *Enrolment in institutions of higher education per 100 000 population* | *VI* *Percentage literate of population 15 years of age and over* |
|---|---|---|---|---|---|---|---|
| *Africa Northern* (continued) | | | | | | | |
| Morocco | | | | | | | |
| Former French zone | 1950 | 23 26 | 2 6 | 2 3 | | 9 (1951) | |
| | 1954 | 23 26 | 4 9 | 4 4 | | 13 (1954) | 10-15 |
| Former Spanish zone | 1950 | 22 27 | 7 4 | 6 6 | | 6 (1953) | (1950 E) |
| | 1953 | 22 27 | 10 0 | 9 2 | | | |
| Somaliland (It ) | 1950 | 22 27 | 3 | 3 | 28 (1954) | | 1 5 |
| | 1954 | 22 27 | 7 | 7 | | 7 (1954) | (1950 E) |
| Sudan | 1951 | 22 27 | 1 7 | 1 7 | | 4 (1950) | 5 10 |
| | 1953 | 22 27 | 1 9 | 1 8 | | 7 (1953) | (1950 E) |
| Tunisia | 1950 | 24-27 | 5 7 | 5 1 | 38 (1954) | 46 (1950) | 15 20 |
| | 1954 | 24 27 | 7 2 | 6 2 | | 49 (1954) | (1950 E) |
| *Africa Tropical and Southern* | | | | | | | |
| Angola | 1951 | 22 27 | 4 | 3 | 34 (1954) | — | 1 5 |
| | 1954 | 22 27 | 1 5 | 1 4 | | — | (1950 E) |
| Basutoland | 1950 | 22 27 | 15 6 | 15 4 | 51 (1954) | 8 (1950) | 50-55 |
| | 1954 | 22 27 | 17 6 | 17 3 | | 10 (1954) | (1950 E) |
| Bechuanaland | 1950 | 22 27 | 5 9 | 5 8 | 34 (1954) | 2 (1950) | 20-25 |
| | 1954 | 22 27 | 7 0 | 6 9 | | 2 (1954) | (1950 E) |
| Belgian Congo | 1950 | 22 27 | 8 1 | 8 0 | 27 (1954) | | 35-40 |
| | 1954 | 22 27 | 8 9 | 8 6 | | 1 (1954) | (1950 E) |
| Cameroons (Fr ) | 1950 | 22 27 | 4 3 | 4 3 | 48 (1954) | 2 (1950) | 5 10 |
| | 1954 | 22 27 | 6 9 | 6 7 | | 2 (1954) | (1950 E) |
| French Eq Africa | 1950 | 22 27 | 2 1 | 2 0 | 46 (1954) | | 1 5 |
| | 1954 | 22 27 | 3 0 | 2 8 | | 2 (1954) | (1950 E) |
| French West Africa | 1950 | 22-27 | 1 0 | 9 | 37 (1953) | 2 (1950) | 1 5 |
| | 1954 | 22 27 | 1 6 | 1 5 | | 4 (1954) | (1950 E) |
| Gambia | 1950 | 22 27 | 1 7 | 1 5 | 36 (1954) | 10 (1950) | 5 10 |
| | 1954 | 22 27 | 2 0 | 1 7 | | 16 (1954) | (1950 E) |
| Gold Coast and Togoland (Br ) | 1950 | 22 27 | 6 6 | 6 3 | 32 (1955) | 22 (1950) | 20-25 |
| | 1955 | 22 27 | 12 1 | 11 8 | | 28 (1954) | (1950 E) |
| Kenya | 1950 | 22 27 | 6 9 | 6 6 | 42 (1955) | 2 (1951) | 20-25 |
| | 1955 | 22 27 | 7 4 | 7 2 | | 5 (1954) | (1950 E) |
| Liberia | 1950 | 22 27 | 2 0 | 1 9 | 25 (1952) | 10 (1950) | 5 10 |
| | 1955 | 22 27 | 3 5 | 3 4 | | 18 (1955) | (1950 E) |
| Madagascar | 1950 | 22 27 | 5 5 | 5 4 | 61 (1954) | | 33 5 |
| | 1954 | 22-27 | 6 5 | 6 0 | | 9 (1954) | (1953 C) |
| Mauritius | 1950 | 22 27 | 12 5 | 11 9 | 33 (1954) | 44 (1950) | 51 8 |
| | 1954 | 22 27 | 15 8 | 14 3 | | 48 (1954) | (1952 C) |
| Mozambique | 1950 | 22 27 | 2 8 | 2 6 | 101 (1954) | | 3 1 |
| | 1954 | 22 27 | 4 1 | 4 0 | | | (1950 C) |
| Nigeria and Cameroons (Br ) | 1950 | 22 27 | 3 2 | 3 1 | 26 (1951) | 6 (1950) | 11 5 |
| | 1955 | 22 27 | 5 2 | 5 1 | | 10 (1954) | (1952/53 C) |
| Northern Rhodesia | 1950 | 22 27 | 8 8 | 8 7 | 41 (1954) | 2 (1950) | 20-25 |
| | 1954 | 22 27 | 9 2 | 9 1 | | 3 (1954) | (1950 E) |
| Nyasaland | 1950 | 22 27 | 9 5 | 9 5 | 42 (1955) | 1 (1950) | 6 5 |
| | 1955 | 22 27 | 9 7 | 9 6 | | 1 (1954) | (1945 C) |
| Portuguese Guinea | 1950 | 22 27 | 7 | 6 | | | 1 5 |
| | 1954 | 22 27 | 1 3 | 1 3 | | | (1950 E) |
| Réunion | 1950 | 22 27 | 18 9 | 16 7 | 42 (1954) | | 50-55 |
| | 1954 | 22 27 | 18 2 | 17 6 | | 17 (1954) | (1950 E) |
| Ruanda Urundi | 1950 | 22 27 | 2.7 | 2.7 | 41 (1954) | | 5-10 |
| | 1954 | 22 27 | 5 1 | 5 0 | | 1 (1954) | (1950 E) |
| Sierra Leone | 1950 | 22 27 | 2 0 | 1 8 | 38 (1954) | 10 (1950) | 5 10 |
| | 1954 | 22 27 | 2 3 | 2 1 | | 17 (1954) | (1950 E) |
| Southern Rhodesia | 1951 | 22 27 | 12 0 | 11 9 | 33 (1951) | | 20-25 |
| | | | 19 9 | | | | (1950 E) |

*Appendix A* (continued)

| Country | Year | I<br>Percentage of total population in 5 14 year-age group | II<br>Percentage of total population enrolled in primary secondary and technical schools | III<br>Percentage of total population enrolled in primary schools alone | IV<br>Number of pupils per teacher in primary schools for latest year known | V<br>Enrolment in institutions of higher education per 100 000 population | VI<br>Percentage illiterate of population 15 years of age and over |
|---|---|---|---|---|---|---|---|
| *Africa Tropical and Southern* (continued) | | | | | | | |
| South West Africa | 1950 | 22 27 | 9 0 | 8 8 | 35 (1950) | | 20-25 |
| | 1951 | 22 27 | 8 9 | | | | (1950 E) |
| Swaziland | 1950 | 22 27 | 7 5 | 7 3 | 34 (1954) | 1 (1950) • | 15 20 |
| | 1954 | 22 27 | 9 3 | 8 9 | | | (1950 E) |
| Tanganyika | 1950 | 22 27 | 2 4 | 2 3 | 57 (1954) | 1 (1950) • | 5 10 |
| | 1954 | 22 27 | 4 0 | 3 5 | | 2 (1954) • | (1950 E) |
| Togoland (Fr ) | 1950 | 22 27 | 4 2 | 4 1 | 53 (1954) | 5 (1950) • | 5-10 |
| | 1954 | 22 27 | 5 6 | 5 4 | | 6 (1954) • | (1950 E) |
| Uganda | 1950 | 22 27 | 4 5 | 4 4 | 30 (1954) | 5 (1950) • | 25 30 |
| | 1954 | 22 27 | 6 3 | 5 9 | | 17 (1954) • | (1950 E) |
| Union of South Africa | 1950 | 22 27 | 10 5 • | | 38 (1950) • | 18 (1950) • | 40-45 |
| | | 19 6 • | 21 7 • | | 24 (1950) • | 898 (1950) •• | (1950 E) |
| Zanzibar | 1950 | 22 27 | 3 5 | 3 2 | 26 (1954) | 17 (1951) • | 5 10 |
| | 1954 | 22 27 | 4 5 | 4 2 | | 24 (1954) • | (1950 E) |

• 1950 population estimate of 1,104 000 used for all calculations
• 1951 population estimate of 15 000 000 used for all calculations.
• 1954 census population of 1,092 000 used for all calculations
• Excluding pupils in unmodernized Koranic schools In 1954, 3 9 per cent of the Moroccan and 22 2 per cent of the non Moroccan population were enrolled in primary and secondary schools
• Moroccans only, including enrolment in higher institutions outside Morocco non Moroccan enrolment totalled 732 per 100 000 of the non Moroccan pop[illegible]
• N [illegible]
• In [illegible]
• In [illegible]
• Inc[illegible] for natives not reported on in prev[illegible] years, 1951 and 1954 percentages are not comparable
Africans only, including enrolment in higher institutions outside the territory
• Gold Coast only
• 1955 population estimate of 1,250 000 used for all calculations
• Indigenous population 14 years of age and over, sample survey
• Nigeria only
• Africans only
• Not [illegible]
Scho[illegible]
Schoc[illegible] Coloured
Including semi literates
Nigeria only, African population [illegible]
• Af[illegible]
[illegible] secondary schools, percentage of total European population enrolled
Non European enrolment
•• European enrolment

| Country | Year | I<br>Percentage of total population in 5 14 year-age group | II<br>Percentage of total population enrolled in primary secondary and technical schools | III<br>Percentage of total population enrolled in primary schools alone | IV<br>Number of pupils per teacher in primary schools for latest year known | V<br>Enrolment in institutions of higher education per 100 000 population | VI<br>Percentage illiterate of population 15 years of age and over |
|---|---|---|---|---|---|---|---|
| *America, Middle* | | | | | | | |
| Barbados | 1950 | 20-22 | 17 3 | 14 9 | 35 (1951) | 28 (1950) | 91 1 |
| | 1954 | 20 22 | 16 3 | 15 0 | | 21 (1954) | (1946 C) |
| Costa Rica | 1950 | 26 2 | 14 8 | 14 1 | 25 (1954) | 163 (1950) | 79 4 |
| | 1954 | 25 26 | 16 5 | 15 1 | | 222 (1952) | (1950 C) |
| Cuba | 1950 | 23 27 | 13 0 | 12 1 | 31 (1950) | 312 (1950) | 75 80 |
| | 1953 | 23 7 | 12 5 | 11 5 | | 342 (1953) | (1950 E) |
| Dominican Republic | 1949 | 25 27 | 12 1 | 11 3 | 63 (1954) | 95 (1949) | 42 9 |
| | 1954 | 25-27 | 11 8 | 11 0 | | 128 (1954) | (1950 C) |
| El Salvador | 1950 | 25 6 | 8 6 | 7 7 | 33 (1954) | 131 (1951) | 39 4 |
| | 1955 | 24-26 | 11 2 | 10 3 | | 48 (1954) | (1950 C) |
| Guadeloupe | 1950 | 22 24 | 16 5 | 15 4 | 68 (1954) | | 65-70 |
| | 1954 | [illegible] | 17 9 • | 16 8 • | | | (1950 E) |

*Appendix A* (continued)

| Country | Year | I<br>Percentage of total population in 5 14 year-age group | II<br>Percentage of total population enrolled in primary, secondary and technical schools | III<br>Percentage of total population enrolled in primary schools alone | IV<br>Number of pupils per teacher in primary schools for latest year known | V<br>Enrolment in institutions of higher education per 100 000 population | VI<br>Percentage literate of population 15 years of age and over |
|---|---|---|---|---|---|---|---|
| *America, Middle* (continued) | | | | | | | |
| Guatemala | 1950 | 25 4 | 6 6 | 5 9 | 27 (1955) | 82 (1950) | 29 4 |
| | 1955 | 25 26 | 7 2 | 6 7 | | 107 (1954) | (1950 C) |
| Haiti | 1950 | 25 8 | 1 7 | 1 5 | 45 (1953) | 20 (1952) | 10 5 |
| | 1954 | 22-27 | 6 0 | 5 6 | | 30 (1954) | (1950 C) |
| Honduras | 1950 | 24 8 | 7 0 | 6 8 | 28 (1954) | 59 (1952) | 35.2 [d] |
| | 1954 | 22-26 | 8 2 | 7 8 | | 52 (1954) | (1950 C) |
| Jamaica | 1950 | 22 25 | 15 5 [b] | 15 0 [b] | 51 (1954) | 31 (1950) [c] | 70-75 |
| | 1954 | 22-25 | 15 7 [b] | 14 4 [b] | | 25 (1954) | (1950 E) |
| Martinique | 1951 | 22-27 | 20 2 | 18 0 | 37 (1951) | 105 (1951) | 70-75 |
| | 1952 | 22-27 | 19 4 | 17 5 | | | (1950 E) |
| Mexico | 1950 | 26 3 | 10 8 | 10 3 | 40 (1953) | 207 (1951) | 56 8 |
| | 1953 | 26-27 | 11 6 | 11 1 | | | (1950 C) [e] |
| Nicaragua | 1950 | 27 3 | | 8 5 | 28 (1953) | | 38 4 |
| | 1953 | 26-27 | 10 6 | 9 2 | | 92 (1953) | (1950 C) |
| Panama | 1950 | 25 4 | 16 3 | 13 8 | 33 (1954) | 212 (1950) | 69 9 |
| | 1954 | 25-27 | 17 7 | 15 0 | | 221 (1954) | (1950 C) [i] |
| Puerto Rico | 1950 | 26 6 | 23 9 | 17 3 | 53 (1954) | 607 (1950) | 73 3 |
| | 1954 | 26-28 | 29 5 | 19 1 | | 682 (1954) | (1950 C) |
| Trinidad and Tobago | 1950 | 23-25 | 20 8 | 19 4 | 38 (1954) | 67 (1950) [c] | 73 8 |
| | 1954 | 23-25 | 22 5 | 20 8 | | 106 (1954) [c] | (1946 C) |
| *America, Northern* | | | | | | | |
| Canada | 1950 | 17 8 | 18 2 [f] | 15 2 [f] | 27 (1954) [g] | 542 (1950) | 97 98 |
| | 1954 | 19 1 | 19 7 | 16 8 | | 459 (1955) | (1950 E) |
| United States | 1950 | 16 3 | 18 9 [f] | 14 6 [f] | 32 (1951) | 1,753 (1950) [h] | 97 5 |
| | 1955 | 18 4 | 22 2 | 17 6 | | 1,816 (1955) [h] | (1952 E) [j] |
| *America South* | | | | | | | |
| Argentina | 1950 | 18 21 | 13 8 | 12 9 | 23 (1954) | 462 (1950) | 86 4 |
| | 1954 | 18 21 | 15 8 | 13 7 | | 756 (1954) | (1947 C) [i] |
| Bolivia [a] | 1950 | 23 9 | 6 9 | 6 1 | 26 (1950) | 154 (1950) | 32 1 |
| | 1952 | 24-25 | 8 9 | 7 6 | | | (1950 C) |
| Brazil | 1950 | 25 7 | 8 2 | 7 3 | 30 (1954) | 85 (1950) | 49 4 |
| | 1954 | 24-26 | 9 2 | 7 9 | | 117 (1954) | (1950 C) |
| British Guiana | 1950 | 23 25 | 19 9 | 18 7 | 42 (1954) | 38 (1950) [c] | 75 9 |
| | 1954 | 23 25 | 20 5 | 18 6 | | 60 (1954) [c] | (1946 C) |
| Chile | 1951 | 21-23 | 14 8 | 12 2 | | 167 (1949) | 80 1 |
| | 1954 | 21-23 | 17 9 | 15 1 | | | (1952 C) |
| Colombia | 1950 | 25 27 | 8 9 | 7 2 | 39 (1954) | 94 (1950) | 50-55 |
| | 1954 | 25-27 | 10 0 | 9 1 | | 97 (1954) | (1950 E) |
| Ecuador | 1950 | 25 8 | 11 8 | 10 8 | 42 (1953) | 131 (1950) | 55 7 |
| | 1953 | 25-26 | 12 6 | 11 5 | | 148 (1953) | (1950 C) |
| Paraguay | 1950 | 27 4 | 14 6 | 14 0 | 32 (1953) | 118 (1950) | 65 8 |
| | 1953 | 26-27 | 17 0 | 15 9 | | 169 (1953) | (1950 C) |
| Peru | 1950 | 25 27 | 11 8 | 10 9 | 38 (1954) | 154 (1950) | 45 50 |
| | 1954 | 25-27 | 12 4 | 11 3 | | 170 (1954) | (1950 E) |
| Surinam | 1949 | 21 24 | 16 5 | 15 6 | 38 (1954) | 94 (1950) | 70-75 |
| | 1954 | 21 24 | 18 7 | 16 9 | | 105 (1954) | (1950 E) |
| Uruguay | 1951 | 17-21 | 12 2 | 10 7 | 33 (1953) | 483 (1951) | 80-85 |
| | 1953 | 17-21 | 12 7 [k] | 10 8 [k] | | | (1950 E) |
| Venezuela | 1951 | 25 26 | 11 2 | 10 5 | 36 (1953) | 128 (1951) | 52.2 |
| | 1953 | 25-26 | 11 8 | 11 2 | | 97 (1952) | (1950 C) |

[a] Public schools only Including pre school education
[b] Public schools only
[c] Including enrolment in institutions outside the territory
[d] Population 10 years of age and over
[e] Population 6 years of age and over
[f] Including pre school education
[g] Primary and secondary schools
[h] Including junior colleges and teacher training
[i] Excluding tribal Indians
[j] Population 14 years of age and over, sample survey
[k] Including pre-school and special education

*Appendix A* (continued)

| Country | Year | I Percentage of total population in 5 14 year age group | II Percentage of total population enrolled in primary secondary and technical schools | III Percentage of total population enrolled in primary schools alone | IV Number of pupils per teacher in primary schools for latest year known | V Enrolment in institutions of higher education per 100 000 population | VI Percentage literate of population 15 years of age and over |
|---|---|---|---|---|---|---|---|
| *Asia East South Central and South East* | | | | | | | |
| Afghanistan • | 1950 | 22 27 | 8 | 7 | 33 (1954) | 4 (1950) | 1 5 |
| | 1955 | 22 27 | 1 0 | 9 | | 6 (1954) | (1950 E) |
| British Borneo • | 1950 | 22 27 | 6 7 | 6 5 | 23 (1954) | | 17 19 |
| | 1954 | 22 27 | 8 2 | 7 5 | | | (1950 E) |
| Burma | 1950 | 23 25 | 2 1 | 1 9 | 50 (1953) | 22 (1950) | 45 50 |
| | 1955 | 23 25 | 7 1 | 6 1 | | 67 (1954) | (1950 E) |
| Cambodia | 1952 | 22 27 | 4 6 | 4 5 | 39 (1954) | 4 (1952) | 15 20 |
| | 1954 | 22 27 | | 5 9 • | | 3 (1954) | (1950 E) |
| Ceylon | 1950 | 23 26 | 17 9 | 14 6 | 36 (1952) | 34 (1950) | 63 0 |
| | 1955 | 23 26 | 18 4 | 15 6 | | 49 (1954) | (1946 C) |
| China Mainland • | 1949 | 22 27 | 4 4 | 4 2 | | 20 (1949) | |
| | 1954 | 22 27 | 9 5 | 8 8 | | 44 (1954) | 45-50 |
| China Taiwan | 1950 | 23 25 | 13 7 | 12 1 | 41 (1955) | 82 (1950) | (1950 E) |
| | 1955 | 23 25 | 16 2 | 13 8 | | 205 (1955) | |
| Hong Kong | 1950 | 16-21 | 7 6 | 5 9 | 25 (1954) | 31 (1950) | 55 60 |
| | 1954 | 16-21 | 10 4 • | 8 2 • | | 71 (1953) • | (1950 E) |
| India | 1950 | 23-25 | 6 6 | 5 1 | 33 (1953) | 111 (1950) | 19 3 |
| | 1953 | 23 25 | 7 3 | 5 6 | | 147 (1953) | (1951 C) |
| Indonesia | 1951 | 22 27 | 7 1 | 6 9 | 62 (1954) | 8 (1951) | 15 20 |
| | 1954 | 22 27 | 9 3 | 8 7 | | 32 (1954) | (1950 E) |
| Japan | 1950 | 21 23 | 22 3 | 13 5 | 36 (1955) | 471 (1950) | 97 9 |
| | 1955 | 21 23 | 22 7 | 13 8 | | 686 (1955) | (1948 C) • |
| Korea, South | 1954 | 24 26 | 17 3 | 15 3 | 68 (1954) • | 306 (1954) | 35-40 |
| | | | | | | | (1950 E) |
| Laos | 1950 | 22 27 | 3 0 | 2 9 | 36 (1955) | | 15 20 |
| | 1955 | 22 27 | 4 6 | 4 5 | | | (1950 E) |
| Malaya, Federation of | 1950 | 23 27 | 13 3 | 12 6 | 34 (1952) | 5 (1950) | 38 4 |
| | 1954 | 23 27 | 13 5 | 12 4 | | 20 (1954) • | (1947 C) |
| Mongolian People s Rep | 1951 | 22 27 | 12 7 | | | 133 (1951) | 55-60 |
| | | | | | | | (1950 F) |
| Nepal | 1954 | 22 27 | 9 | | | 16 (1954) | 9 5 |
| | | | | | | | (1950/52 C) • |
| Pakistan | 1950 | 22 27 | 5 8 | 4 2 | 36 (1950) | 94 (1950) | 13 5 |
| | 1954 | 22 27 | 6 7 | 5 2 | | 96 (1954) | (1951 C) • |
| Philippines | 1951 | 25-27 | 19 8 | 18 7 • | 43 (1952) | | 60 0 |
| | 1954 | 25 27 | 19 1 | 16 1 | | | (1948 C) |
| Portuguese India | 1951 | 22 27 | 1 9 | 1 7 | 51 (1953) | 28 (1951) | 15 20 |
| | 1954 | 22 27 | 7 4 | 5 2 | | 24 (1954) | (1950 E) |
| Ryukyu Is | 1950 | 22 25 | 22 3 | 20 3 | 40 (1954) | 51 (1949) | 74 6 |
| | 1954 | 22 25 | 21 8 | 12 7 | | 188 (1954) | (1950 C) |
| Singapore | 1950 | 22 25 | 14 5 | 12 9 | 29 (1954) | 77 (1950) | 46 5 |
| | 1954 | 22 25 | 15 2 • | 13 4 • | | 48 (1954) • | (1947 C) |
| Thailand | 1951 | 24-27 | 16 1 | 15 2 | 35 (1955) | 173 (1951) | 52 0 |
| | 1955 | 24-27 | 16 4 | 14 6 | | 106 (1955) | (1947 C) |
| Timor (Port ) | 1950 | 22 27 | 8 | 8 | 30 (1953) | | 1 5 |
| | 1954 | 22 27 | 1 4 | 1 4 | | | (1950 E) |
| Viet Nam • | | | | | | | 15 20 |
| | | | | | | | (1950 E) |
| West New Guinea • | 1950 | 22 27 | 4 2 | 4 1 | 34 (1954) | | 5 10 |
| | 1954 | 22 27 | 5 5 | 5 3 | | | (1950 E) |
| *Asia South West* | | | | | | | |
| Aden Colony and Protectorate | 1950 | 22 27 | 1 6 | | 25 (1954) | | 1 5 |
| | 1954 | 22 27 | 2 1 | 1 8 | | | (1950 E) • |
| Cyprus | 1950 | 20-23 | 15 8 | 13 2 | 40 (1953) | | 60 5 |
| | 1953 | 20-23 | 17 9 | 14 2 | | | (1946 C) |
| Iran | 1950 | 22 27 | 4 3 | 4 0 | 29 (1953) | 30 (1950) | 10-15 |
| | 1955 | | [illegible] | | | [illegible] | [illegible] |

*Appendix A* (continued)

| *Country* | *Year* | *I* Percentage of total population in 5 14 year-age group | *II* Percentage of total population enrolled in primary secondary and technical schools | *III* Percentage of total population enrolled in primary schools alone | *IV* Number of pupils per teacher in primary schools for latest year known | *V* Enrolment in institutions of h gher ed cation per 100 000 population | *VI* Percentage literate of population 15 years of age and o er |
|---|---|---|---|---|---|---|---|
| *Asia, South West* (continued) | | | | | | | |
| Iraq | 1951 | 22 27 | 5 2 | 4 4 | 32 (1955) | 102 (1951) | 10 9 |
| | 1955 | 22 27 | 8 0 • | 6 8 • | | 125 (1955) | (1947 C) • |
| Israel | 1951 | 17 19 | 15 4 | 13 8 | 24 (1955) | 326 (1951) | 93 7 |
| | 1955 | 17 19 | 18 4 | 16 0 | | 372 (1955) | (1948 C) • |
| Jordan | 1950 | 22 27 | 7 4 | 6 9 | 39 (1954) | 41 (1950) • | 15 20 |
| | 1955 | 22 27 | 16 8 | 14 3 | | | (1950 E) |
| Lebanon | 1950 | 22 27 | 14 2 | 11 8 | 27 (1955) | 249 (1950) | 45 50 |
| | 1955 | 22 27 | 17 4 | 15 5 | | 311 (1954) | (1950 E) |
| Saudi Arabia • | 1949 | 22 27 | 4 | 4 | 26 (1955) | 0 4 (1949) | 1 5 |
| | 1955 | 22 27 | 8 | 7 | | 2 (1955) | (1950 E) |
| Syria • | 1950 | 22 27 | 8 5 | 7 5 | 34 (1954) | 67 (1951) | 25 30 |
| | 1955 | 22 27 | 9 8 | | | 135 (1954) | (1950 E) |
| Turkey | 1950 | 23 5 | 8 5 | 7 7 | 45 (1955) | 153 (1950) | 31 9 |
| | 1955 | 22 24 | 9 3 | 8 1 | | 101 (1955) • | (1950 C) |
| Yemen | | | | | | | 1 5 |
| | | | | | | | (1950 C) |

• Population estimate of 12 000 000 used for all calculations

• British North Borneo Brunei, Sarawak

• Public schools only

• Including pre school education

• Including enrolment in higher institutions outside the territory

1953 census population of 582 6 millions (excluding Taiwan) used for all calculations

• Not including part time teachers

• Population 15 64 years of age sample survey

• Including enrolment at the University of Malaya at Singapore

• Population estimate of 700 000 used for all calculations

• Including pre school education Not including unregistered schools

Including enrolment of students from outside the territory

m Singapore students at the University of Malaya plus enrolment at higher institutions outside the territory

• Population of the area for which school enrolment is available (that under authority of Saigon Government) not known

• All ages sample census in two districts

• All ages including semi literates

• Enrolment in higher institutions outside Jordan

1952 population estimate of 7,000 000 used for all calculations

• Population including nomads estimated at 288 000

• Universities only

• Protectorate, 21 0 for Aden Colony (1946 census)

Population 5 years of age and over

• Jewish population

| *Country* | *Year* | *I* Pe centage of total popula ion in 5 14 year age group | *II* Percen age of total popula ion enrolled in p imary secondary and technical schools | *III* Percentage of total population enrolled in primary schools alone | *IV* Number of pup ls per teacher in primary schools for latest year known | *V* Enrolment in institutions of h gher education per 100,000 population | *VI* Percentage literate of population 15 years of age and over |
|---|---|---|---|---|---|---|---|
| *Europe* | | | | | | | |
| Albania | 1951 | 20-23 | 14 9 | 12 4 | 86 (1954) | | 70-75 |
| | 1954 | 20-23 | 13 3 | 12 7 | | 88 (1954) | (1950 E) |
| Austria | 1950 | 15 3 | 13 5 | 12 3 | 36 (1955) | 327 (1950) | 98 99 |
| | 1955 | 15 3 | 12 5 | 10 7 | | 302 (1955) | (1950 E) |
| Belgium | 1950 | 12 9 | 13 7 | 9 4 | 24 (1951) | 234 (1950) | 96 7 |
| | 1954 | 13 7 | 14 8 | 10 2 | | 261 (1954) | (1947 C) |
| Bulgaria | 1949 | 18 20 | 15 2 | 13 0 | 27 (1949) | 414 (1949) | 70-75 |
| | 1955 | 18 20 | 15 2 • | | | 491 (1955) | (1950 E) |
| Czechoslovakia | 1950 | 18 20 | 11 7 | 10 0 | 28 (1954) | 608 (1950) | 97 98 |
| | 1954 | 18 20 | 15 5 | 13 9 | | 370 (1954) • | (1950 E) |
| Denmark | 1950 | 16 6 | 14 3 | 9 7 | 36 (1953) | 417 (1950) | 98 99 |
| | 1953 | 17 8 | 16 2 • | 11 4 | | 362 (1953) | (1950 E) |

*Appendix A* (continued)

| Country | Year | I<br>Percentage of total population in 5-14 year-age group | II<br>Percentage of total population enrolled in primary secondary and technical schools | III<br>Percentage of total population enrolled in primary schools alone | IV<br>Number of pupils per teacher in primary schools for latest year known | V<br>Enrolment in institutions of higher education per 100 000 population | VI<br>Percentage literate of population 15 years of age and over |
|---|---|---|---|---|---|---|---|
| *Europe* (continued) | | | | | | | |
| Finland | 1950 | 17 3 | 15 4 | 12.2 | 28 (1954) [d] | 360 (1950) | 98-99 |
| | 1954 | 19 7 | 17 2 | 13 5 | | 380 (1954) | (1950 E) |
| France | 1950 | 12 3 | 12 5 | 9 7 | 24 (1951) | 329 (1950) | 96 4 |
| | 1954 | 15 3 | 14 7 | 11 4 | | 416 (1955) | (1946 C) [e] |
| German Democratic Republic | 1954 | 16-18 | 11 8 | 10 8 | | 337 (1954) | |
| Germany Federal Republic of (Incl W Berlin) | 1951 | 16 0 | 15 7 | 13 2 | | 248 (1951) | 98-99 (1950 E) |
| | 1954 | 14 7 | 13 0 | 10 2 | | 282 (1954) | |
| Greece | 1951 | 18 4 | 15 1 | 11 9 | 46 (1954) | 156 (1951) | 74 1 |
| | 1954 | 16-18 | 14 9 | 13 3 | | 237 (1954) | (1951 C) |
| Hungary | 1951 | 15-16 | 14 2 | 13 0 | 24 (1955) | 492 (1951) | 95 0 |
| | 1955 | 14-15 | 13 7 | 12 5 | | 313 (1955) | (1949 C) [f] |
| Iceland | 1950 | 18 1 | 18 1 | 11 3 | 29 (1950) | 434 (1950) | 98 99 |
| | 1954 | 18 20 | 16 4 | 11 2 | | 487 (1954) | (1950 E) |
| Ireland | 1950 | 18-20 | 19 9 | 15 2 | 37 (1954) | 260 (1950) | 98 99 |
| | 1954 | 18 20 | 19 6 | 16 9 | | 276 (1952) | (1950 E) |
| Italy | 1950 | 17 1 | 12 4 | 10 0 | 26 (1953) | 328 (1950) | 85-90 |
| | 1953 | 16-18 | 12 5 | 9 6 | | 290 (1953) | (1950 E) |
| Luxembourg | 1951 | 13 15 | 11 9 | 9 8 | 27 (1954) | | 96-97 |
| | 1955 | 13 15 | 11 3 | 9 1 | | | (1950 E) |
| Malta | 1953 | 22 24 | 19 0 | 17 5 | 30 (1953) | 123 (1953) | 57 6 (1948 C) |
| Netherlands | 1950 | 17 4 | 18 9 | 13 6 | 36 (1955) | 279 (1950) | 98 99 |
| | 1955 | 19 6 | 20 2 | 15 8 | | 274 (1955) | (1950 E) |
| Norway | 1951 | 15 0 | 13 7 | 10.2 | 28 (1954) [d] | 186 (1951) | 98 99 |
| | 1954 | 16 6 | 13 8 | 11 9 | | 161 (1954) | (1950 E) |
| Poland | 1950 | 16-18 | 14 0 | 13 1 | 42 (1950) | 473 (1949) | 90-95 |
| | 1955 | 16-18 | 13 0 | 12 3 | | 541 (1954) | (1950 E) |
| Portugal | 1950 | 18 9 | 9 0 | 7 9 | 39 (1955) | 186 (1951) | 55 9 |
| | 1955 | 18 5 | 10 6 | 9 5 | | 169 (1953) | (1950 C) |
| Romania | 1951 | 18-20 | 13.2 | 11 2 | | 350 (1954) | 76 9 (1948 C) [i] |
| Spain | 1951 | 16-18 | 11 5 | 10 0 | 44 (1953) | 255 (1951) | 82.7 |
| | 1953 | 16-18 | 10 9 [c] | 9 3 [c] | | 216 (1953) | (1950 C) [j] |
| Sweden | 1950 | 14 5 | 11 7 | 8 7 | 23 (1953) | 211 (1950) | 98-99 |
| | 1955 | 16.3 | 15 4 | 11 3 | | 311 (1955) | (1950 E) |
| Switzerland | 1951 | 14 8 | 12 0 | 10 0 | 25 (1953) | 352 (1951) | 98 99 |
| | 1953 | 15 5 | 12.8 | 10 6 | | 384 (1954) [h] | (1950 E) |
| United Kingdom | | | | | | | |
| England and Wales | 1951 | 13 7 | 14 4 | 9 8 | 30 (1953) | | |
| | 1953 | 14 7 | 14 5 | 10 3 | | 151 (1953) [k] | |
| | 1955 | 15 1 | 14 7 | | | | |
| Northern Ireland | 1950 | 17 9 | | 14 1 | 33 (1954) | 174 (1950) | 98-99 |
| | 1954 | 18 4 | 17 7 | 15 0 | | 271 (1953) | (1950 E) |
| Scotland | 1951 | 15 4 | 15 7 | 11 0 | 33 (1954) | | |
| | 1955 | 16 7 | 16 6 | | | 341 (1953) | |
| Yugoslavia | 1950 | 20 1 | 13 8 | 9 4 | 38 (1954) | 372 (1950) | 72.8 |
| | 1954 | 19 2 | 12 7 | 8 4 | | 299 (1954) | (1953 C) [l] |

[a] Including enrolment in evening courses.
[b] Students of Czech nationality
[c] Figure for 1952 technical enrolment used
[d] Not including part time teachers
[e] Population 14 years of age and over
[f] Population 7 years of age and over
[g] Public schools only, including pre-school education
[h] About 75 per cent of the students in higher institutions are Swiss
[i] Population 7 years of age and over, provisional result
[j] Population 10 years of age and over
[k] Universities only
[l] Estimate based on 2 per cent sample of census returns

*Appendix A* (continued)

| Country | Year | I Percentage of total population in 5 14 year-age group | II Percentage of total population enrolled in primary secondary and technical schools | III Percentage of total population enrolled in primary schools alone | IV Number of pupils per teacher in primary schools for latest year known | V Enrolment in institutions of higher education per 100 000 population | VI Percentage literate of population 15 years of age and over |
|---|---|---|---|---|---|---|---|
| *Oceania* | | | | | | | |
| Australia | 1950 | 15 7 | 18 9 | 14 4 | 28 (1953) • | 374 (1950) | 98 99 |
| | 1953 | 17 2 | 17 2 | | | 407 (1954) | (1950 E) |
| New Zealand | 1950 | 16 3 | 18 9 | 16 1 | 32 (1954) | 562 (1950) | 98 99 |
| | 1954 | 19 1 | 20 7 | 17 0 | | 517 (1954) | (1950 E) |
| Fiji | 1950 | 24-27 | 18 3 | 17 6 | 42 (1955) | | 64 4 |
| | 1955 | 24-27 | 18 6 | 17 7 | | 82 (1954) • | (1946 C) |
| Hawaii | 1950 | 18 4 | 23 8 | 14 4 | | 1 422 (1950) | 90-95 |
| | 1954 | 18 20 | 23 0 | 14 4 | | 782 (1954) | (1950 E) |
| New Guinea (Austr ) | 1950 | 22 27 | 8 4 | 8 4 | 27 (1954) | | 5 10 |
| | 1954 | 22 27 | 9 3 | 9 1 | | | (1950 E) |
| Papua • | 1950 | 22 27 | 9 5 | | | | 15 20 |
| | 1954 | 22 27 | 10 1 | | 28 (1954) | | (1950 E) |

• Primary and secondary

• Including enrolment at higher institutions in New Zealand

• 1955 population estimate of 446 000 used for all calculations.

| Country | Year | I Percentage of total population in 5 14 year-age group | II Percentage of total population enrolled in primary secondary and technical schools | III Percentage of total population enrolled in primary schools alone | IV Number of pupils per teacher in primary schools for latest year known | V Enrolment in institutions of higher education per 100 000 population | VI Percentage literate of population 15 years of age and over |
|---|---|---|---|---|---|---|---|
| *Union of Soviet Socialist Republics* • | 1950 | | 18 8 • | 17 3 • | | 462 (1950) • | Practically complete |
| | 1955 | | 14 9 • | 11 4 • | 17 (1955) • | 613 (1955) • | (1956 E) |

SSSR, 1956

• Enrolment in general schools (grade 1 10) plus enrolment in specialized secondary schools and other intermediate specialized educational establishments Not including enrolment in part time schools for young industrial and agricultural workers or enrolment in correspondence courses

• Enrolment in grades 1 7 of general schools

• Pupils and teachers in general schools (grades 1 10)

• Not including enrolment in correspondence courses

*Appendix B*

DAILY NEWSPAPER CIRCULATION AND NEWSPRINT CONSUMPTION

| Country | Daily newspapers copies per 1 000 population: Earlier year | Daily newspapers copies per 1 000 population: Latest year known | Newsprint consumption kilogrammes per capita: 1946-50 average | Newsprint consumption kilogrammes per capita: 1955 or latest year known |
|---|---|---|---|---|
| *Africa Northern* | | | | |
| Algeria | 42 (1949) | 24 (1954) | 0 5 | 0 4 (1953) |
| Egypt | 18 (1949) | 25 (1952) | 0 6 | 0 9 |
| Eritrea | | 6 (1952) | | } 0 2 (1953) • |
| Ethiopia | | Less than 5 (1952) | | } |
| Libya | | 6 (1952) | | 0 3 (1954) |
| Morocco (Former French Zone) | 23 (1949) | 23 (1955) | 0 3 | 0 9 |
| Somaliland (It ) | | 2 (1953) | | 0 6 (1953) |
| Sudan | | 2 (1955) | | 0 04 (1954) |
| Tunisia | 43 (1949) | 33 (1954) | 0 4 | 0 3 |

*Appendix B* (continued)

| Country | Daily newspapers copies per 1 000 population | | Newsprint consumption kilogrammes per capita | |
|---|---|---|---|---|
| | Earlier year | Latest year known | 1946-50 average | 1955 or latest year known |
| *Africa Tropical and Southern* | | | | |
| Angola | | 4 (1952) | | 0 05 (1954) |
| Belgian Congo | | 2 (1952) | | 0 04 (1954) • |
| Cameroons (Fr ) | | Less than 5 (1954) | | |
| French Eq Africa | | Less than 5 (1954) | | 0 02 (1954) • |
| French West Africa | | 1 (1954) | 0 01 | 0 02 (1954) |
| Gambia | | 5 (1955) | | |
| Gold Coast (Incl British Togoland) | | 18 (1953) | 0 1 | *0 4 |
| Kenya | | 5 (1955) | 0 1 | 0 4 |
| Liberia | | 1 (1952) | | |
| Madagascar | | 2 (1955) | | 0 2 (1954) • |
| Mauritius | | *52 (1956) | 0 4 | 0 4 |
| Mozambique | | 2 (1952) | | 0 2 (1954) • |
| Nigeria | | 5 (1956) | 0 05 (1950) | 0 1 • |
| Northern Rhodesia | | *7 (1955) | 0 1 (1949 50) | 0 1 (1953) |
| Réunion | | 88 (1954) | | 0 3 (1954) |
| Sierra Leone | | 3 (1953) | | 0 05 (1954) |
| Southern Rhodesia | 12 (1950) | 46 (1955) | 0 6 | 1 1 (1953) |
| South West Africa | | 10 (1952) | | 0 2 (1953) |
| Tanganyika | 0 5 (1949) | 1 (1955) | | 0 01 (1954) |
| Togoland (Fr ) | | 1 (1954) | | |
| Uganda | | 1 (1956) | | |
| Union of S Africa | 67 (1950) | 57 (1952) | 3 6 | *3 2 (1953) |

* Provisional
• All kinds of printing paper
• Including Ruanda Urundi.
• All kinds of printing and writing paper
• Including British Cameroons.

| Country | Daily newspapers copies per 1 000 population | | Newsprint consumption kilogrammes per capita | |
|---|---|---|---|---|
| | Earlier year | Latest year known | 1946-50 average | 1955 or latest year known |
| *America Northern* | | | | |
| Canada | 284 (1950) | 242 (1955) | 19 4 (1946-48) | 21 5 |
| United States | 356 (1950) | 339 (1955) | 31 5 | *35 2 |
| *America, Middle* | | | | |
| Barbados | | 42 (1952) | 1 0 (1948 50) | 1 3 |
| Costa Rica | 88 (1950) | 91 (1952) | 1 8 | 2 8 |
| Cuba | 87 (1948) | 101 (1954) | 4 8 | 3 2 (1953) |
| Dominican Rep | 20 (1950) | 24 (1952) | 0 4 | 0 6 |
| El Salvador | 37 (1950) | 33 (1954) | 1 0 | 0 9 |
| Guadeloupe | 17 (1950) | 18 (1954) | | 0 9 • |
| Guatemala | 18 (1950) | 27 (1953) | 0 6 | 0 7 |
| Haiti | 7 (1949) | 4 (1955) | 0 1 | 0 1 |
| Honduras | 10 (1950) | 18 (1955) | 0 3 | 0 4 |
| Jamaica | 38 (1950) | 49 (1955) | 3 0 (1948-50) | 1 8 • |
| Martinique | | 13 (1954) | | *0 4 (1954) |
| Mexico | 46 (1948) | 48 (1952) | 2 2 | *2 1 (1951) |
| Nicaragua | 42 (1950) | 51 (1952) | 0 6 | 0 7 (1953) |
| Panama • | 118 (1950) | 111 (1952) | 3 6 | 2.0 (1954) |
| Puerto Rico | | 56 (1955) | 3 4 | 4 6 |
| Trinidad and Tobago | | 78 (1952) | 2 3 | *2.4 |
| *America South* | | | | |
| Argentina | 207 (1949) | 154 (1954) | 7 8 | 5 3 |
| Bolivia | 14 (1949) | 23 (1952) | 0 8 (1946-48) | 0 9 (1954) |
| Brazil | 30 (1949) | 51 (1954) | 1 6 | 2 8 (1954) |

*Appendix B* (continued)

| Country | Daily newspapers copies per 1 000 population | | Newsprint consumption kilogrammes per capita | |
|---|---|---|---|---|
| | Earlier year | Latest year known | 1946-50 average | 1955 or latest year known |
| *America, South* (continued) | | | | |
| British Guiana | 42 (1950) | 64 (1954) | 1 7 | *1 9 |
| Chile | 79 (1949) | 79 (1952) | 4 2 | 3 6 (1954) |
| Colombia | 53 (1950) | 59 (1954) | 1 3 | 1 7 |
| Ecuador | 26 (1948) | 50 (1952) | 1 1 | 1 0 (1953) |
| Paraguay | 13 (1949) | 12 (1952) | 0 2 | 0 3 (1953) |
| Peru | 38 (1950) | 40 (1952) | 1 1 | 1 6 |
| Uruguay | 172 (1948) | 233 (1952) | 6 5 | 9 8 |
| Venezuela | 65 (1949) | 71 (1954) | 2 0 | *2 8 [b] |

* Provisional
[a] All kinds of printing and writing paper
[b] All kinds of printing paper
[c] Newspaper circulation includes the Canal Zone.

| Country | Daily newspapers copies per 1 000 population | | Newsprint consumption kilogrammes per capita | |
|---|---|---|---|---|
| | Earlier year | Latest year known | 1946-50 average | 1955 or latest year known |
| *Asia, East, South Central, and South East* | | | | |
| Afghanistan | 1 (1950) | 1 (1952) | | |
| Burma | 6 (1949) | 8 (1952) | 0 1 | 0 2 (1954) |
| Cambodia | | 3 (1955) | 0 1 | |
| Ceylon | 29 (1950) | 36 (1954) [a] | 1 2 | 1 0 |
| China Taiwan | | 33 (1955) | 0 8 (1949) | 1 0 (1954) |
| Hong Kong | | 156 (1952) | 4 0 | 8 5 |
| India | 6 (1949) | 7 (1953) | 0 2 | *0 2 |
| Indonesia | | 7 (1952) | 0 1 | 0 1 |
| Japan | 219 (1949) | 397 (1955) | 1 3 | 5 1 [b] |
| Korea South | | | | 0 8 (1954) |
| Laos | | 1 (1952) | | |
| Malaya and Singapore | 32 (1948) | 50 (1952) | 1 0 | 1 4 |
| North Borneo | | 13 (1955) | | |
| Pakistan | 2 (1948) | 9 (1954) | 0 1 | 0 1 |
| Philippines | 26 (1950) | 19 (1954) | 1 1 | 1 3 |
| Thailand | 4 (1950) | 4 (1952) | 0 2 | *0 8 |
| *Asia, South West* | | | | |
| Cyprus | 84 (1950) | 83 (1954) | 1 3 [c] | 1 0 |
| Iran | 5 (1950) | 6 (1952) | | 0 1 (1954) |
| Iraq | 6 (1950) | 21 (1952) | 0 1 | 0 2 |
| Israel | 197 (1950) | 195 (1955) | 2 4 (1950) | 3 4 |
| Jordan | 22 (1950) | 9 (1954) | | 0 2 (1954) |
| Lebanon | 81 (1950) | 77 (1952) | | 0 6 (1954) |
| Saudi Arabia | | 2 (1952) | | |
| Syria | 20 (1950) | 44 (1952) | 0 2 | 0 2 |
| Turkey | 15 (1949) | 32 (1952) | 0 4 | 0 7 (1954) |

[a] Data may exclude some dailies with circulation below 15 000
[b] Excluding consumption of the newsprint substitute Senka
[c] All kinds of printing and writing paper

| Country | Daily newspapers copies per 1 000 population | | Newsprint consumption kilogrammes per capita | |
|---|---|---|---|---|
| | Earlier year | Latest year known | 1946 50 average | 1955 or latest year known |
| *Europe* | | | | |
| Austria | 257 (1950) | 214 (1952) | 3 5 | 4 8 |
| Belgium | 330 (1950) | 338 (1952) | 7 3 [a] | 11 0 [a] |
| Bulgaria | 100 (1950) | 170 (1954) | | 1 5 |
| Czechoslovakia | 191 (1950) | | | |
| Denmark | 414 (1949) | 378 (1953) [b] | 10 8 | 14 8 |
| Finland | 274 (1949) | 269 (1952) | 7 5 | 17 6 |

*Appendix B* (continued)

| *Country* | *Daily newspapers copies per 1 000 population* | | *Newsprint consumption kilogrammes per capita* | |
|---|---|---|---|---|
| | *Earlier year* | *Latest year known* | *1946-50 average* | *1955 or latest year known* |
| *Europe* (continued) | | | | |
| France | 281 (1950) | 246 (1955) | 5 4 • | 9 4 • |
| Germany, Democratic Republic | | 116 (1954) | | |
| Germany Federal Republic of | | 243 (1954) • | 3 8 (1949 50) | 6 8 • |
| Greece | 102 (1949) | 88 (1952) | 1 7 | 1 6 (1954) |
| Hungary | 90 (1949) | 124 (1955)• | | |
| Iceland | | 390 (1953) | 5 3 | 7 0 |
| Ireland | 202 (1950) | 269 (1955) | 6 8 | 11 0 |
| Italy | 98 (1950) | 107 (1952) | 1 4 | 3 5 |
| Luxembourg | 441 (1949) | 427 (1955) | | |
| Malta | | 70 (1952) | 1 1 (1948 50) | 1 0 |
| Netherlands | 281 (1949) | 259 (1955) | 5 6 | 10 4 |
| Norway | 410 (1950) | 435 (1955) | 7 1 | 12 1 (1954) |
| Poland | 123 (1949) | 159 (1955) | | 1 8 |
| Portugal | | 61 (1954)• | 1 4 | 2 2• |
| Romania | | 140 (1955) | | |
| Spain | 60 (1948) | 85 (1954) | 0 8 | 1 3 |
| Sweden | 416 (1950) | 459 (1954) | 18 4 | 22 0 (1954) |
| Switzerland | 349 (1950) | 335 (1955) | 9 5 | 12 6 |
| United Kingdom | 598 (1950) | 570 (1954) | 9 8 | 17 4 |
| Yugoslavia | 91 (1949) | 46 (1955) | 0 8 | 1 2 |

• Provisional
• Including Luxembourg.
• Including Faeroe Islands
• Including the Saar
• Including West Berlin

| *Country* | *Daily newspapers copies per 1 000 population* | | *Newsprint consumption kilogrammes per capita* | |
|---|---|---|---|---|
| | *Earlier year* | *Latest year known* | *1946-50 average* | *1955 or latest year known* |
| *Oceania* | | | | |
| Australia | 440 (1950) | 396 (1955) | 19 5 | 24.2 (1954) |
| New Zealand | 372 (1951) | 394 (1955) | 15 0 | 13 4 (1954) |
| Fiji | | 6 (1953) | | 0 3 |
| Hawaii | 293 (1950) | 342 (1955) | | |
| USSR | | 247 (1955) • | | |

• Including all newspapers

*Appendix C*

RADIO RECEIVERS PER 1,000 POPULATION IN 59 SELECTED COUNTRIES

| *Country* | *1950 (or 1949)* | *1954* | *Country* | *1950 (or 1949)* | *1954* |
|---|---|---|---|---|---|
| *Africa* | | | *America* | | |
| Algeria | 23 | 29 | Argentina | (90) | 159 |
| Angola | 2 | 4 | Brazil | 15 | 61 |
| Egypt | 9 | 29 | Canada | 157 | 466 |
| Gold Coast and Togoland (UK) • | 3 | 6 | Chile | (96) | 101 |
| Kenya • | 2 | 3 | Costa Rica | 29 | 55• |
| Morocco (former French Zone) | 17 | 33 | Cuba | (111) | 155 |
| Mozambique | (1) | 2 | Guatemala | (5) | 11 |
| Nigeria and Cameroons • | 1 | 1 | Haiti | 1 | 4 |
| Northern Rhodesia • | 6 | 12 | Mexico | (31) | 69 |
| Nyasaland | — | 3 | Nicaragua | 19 | 25• |
| Tanganyika | 0 1 | 0 1 | Panama | 69 | 107 |
| Tunisia | 19 | 26 | United States | 592 | 769 |
| Union of South Africa • | (44) | 53 | | | |

*Appendix C* (continued)

| Country | 1950 (or 1949) | 1954 |
|---|---|---|
| *Asia* | | |
| Ceylon • | 4 | 11 |
| Federation of Malaya • | 10 | 20 |
| Hong Kong • | 30 | 43 |
| Indonesia | (2) | 4 |
| Iraq | (6) | 13 |
| Israel | 116 | 156 |
| Japan | (92) | 130 |
| Jordan | 4 | 10 |
| Pakistan | 1 | 1 |
| Philippines | (4) | 10 |
| Singapore • | 37 | 68 |
| Thailand | 5 | 5 |
| Turkey | 15 | 41 |
| *Europe* | | |
| Austria • | 190 | 238 |
| Belgium • | 180 | 225 |
| Denmark | 279 | 300 |
| Finland • | 180 | 232 |
| France | 164 | 210 |
| Germany Fed Rep • | 162 | 245 |
| Greece • | (17) | 64 |
| Hungary • | 65 | 128 |
| Ireland | 100 | 146 |
| Italy | 62 | 116 |
| Netherlands • | 194 | 234 |
| Norway | 240 | 273 |
| Poland • | 59 | 100 |
| Portugal | 26 | 51 |
| Spain | (22) | 56 |
| Sweden • | 307 | 331 |
| Switzerland • | 221 | 245 |
| United Kingdom • • | 242 | 273 |
| Yugoslavia | 21 | 29 |
| *Oceania* | | |
| Australia | 252 | 227 |
| New Zealand | 235 | 242 |

• Provisional

• Including redistribution loudspeakers

• Including combined sound and television licences

*Appendix D*

TELEVISION RECEIVERS PER 1 000 POPULATION IN 26 COUNTRIES •
(available data at end of 1955)

| | |
|---|---|
| Canada | 128 |
| (1954) | (73) |
| Cuba | 25 |
| Puerto Rico | 29 |
| United Kingdom | 106 |
| (1954) | (82) |
| (1953) | (58) |
| (1952) | (38) |
| (1951) | (23) |
| United States | 223 |
| (1954) | (188) |
| (1953) | (157) |
| (1952) | (113) |
| (1951) | (81) |
| Argentina | 6 5 |
| Austria | 0 2 |
| Belgium | 6 8 |
| Brazil | 2 2 |
| Colombia | 1.2 |
| Czechoslovakia | 2 5 |
| Denmark | 1 8 |
| Dominican Republic | 2 1 |
| France | 6 0 |
| Germany | |
| Democratic Republic | 2 8• |
| Federal Republic | 5 7 |
| West Berlin | 5 7 |
| Ireland | 1 4 |
| Italy | 4 1 |
| Japan | 1 1 |
| Mexico | 4 2 |
| Netherlands | 6 5 |
| Norway | 0 1 |
| Philippines | 0 3 |
| Sweden | 0 7 |
| Switzerland | 2 1 |
| Venezuela | 7 2 |
| USSR | 4 1 |

• Provisional

• There are other countries (e g. Hungary Luxembourg Poland Spain Turkey Yugoslavia) where television services are also operating, either experimentally or on an established basis

Chapter VI

# CONDITIONS OF WORK AND EMPLOYMENT

Labour conditions have improved irregularly but substantially since the Second World War The generally favourable situation which made 1954 probably the best of the post-war years continued throughout 1955 and the first half of 1956

As a whole, the world's workers probably produced more and enjoyed a higher standard of living in 1955 than in any earlier year in history Employment, productivity and wages all attained new high levels, and unemployment declined Consumer prices, remarkably stable from 1952 to 1955, showed some tendency to increase in the first part of 1956 Industrial disputes, though exceeding the very low level established in 1954, were well below their recent five-year average

Labour's 1955 gains, most apparent in Western Europe and North America, were spotty in Asia At the end of the year there were still millions of able workers who were unemployed, insecure, or receiving an insufficient wage to maintain a bare minimum level of living

These conclusions are based on statistics provided by the various countries [1] Data on the various topics are not equally available for all countries, while Europe, North America and Oceania are generally well covered, in many cases information is scarce for Asia, South and Middle America and Africa In addition, the differences in definitions and scope of the data often hinder comparisons and call for caution in the interpretation of the statistical information

## STRUCTURE OF THE ECONOMICALLY ACTIVE POPULATION

A survey of major developments in the social situation of mankind must be viewed in the framework of the main characteristics of the world's working population Some indications are therefore given below of the size of the world s labour force and its distribution by sex, by age, and by major sector of the economy For the most part these are based on census data for the period about 1950, which, in many cases, continue to be the most recent information available In the interpretation of such data allowance must be made for considerable differences in national definitions and classifications with respect to certain items, the most important of which is the group of female unpaid family workers

### *Size and main characteristics of the world's labour force*

As of about 1950, the world's working population is estimated at slightly over 1,000 million out of a total world population of roughly 2,500 million, the proportion of the population economically active thus stood at 41 per cent The corresponding proportion of economically active in various regions of the world ranged from 30 per cent in South West Asia to well over 45 per cent in the European regions, reflecting primarily differences in the age structure of the [illegible] the degree of [illegible] Atten- t[illegible] statistics on the e[illegible] population are available for only about 55 per cent of the world's population, the regional coverage ranging from near 100 per cent in the Americas, Western Europe and Oceania, to only about half in Asia and 20 per cent in Africa The figures given for certain areas such as South West Asia, as well as for the world as a whole, derive therefore largely from estimates The proportion of the population at work has generally shown moderate variation over the decades

In all parts of the world, over 90 per cent of the men between the ages of twenty and sixty four are economically active In the case of women of this age group, the percentage at work has shown an upward trend in the last twenty years in a number of countries, from 1930 to 1950 it has risen from 50 to 58 per cent in Japan, from 23 to 35 per cent in Italy, and from 25 to 33 per cent in the United States On the other hand, in France the proportion has declined from 55 per cent in 1921 to 51 per cent in 1946 (for the age groups twenty to fifty-nine years) Similarly, a downward trend has occurred in Switzerland

In the industrial countries, the young people's share (below twenty years of age) of the labour force has tended to decline, for example, in the United Kingdom it has fallen from 20 per cent around 1900 to 10 per cent around 1950, while in the United States over the same period the share declined from 15 per cent to 6 per cent Gainful employment of children under fifteen has almost disappeared in many industrial countries Young people form a considerably larger proportion of the labour force in non industrialized countries

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[1] The statistics used are drawn from a wide variety of sources published and unpublished [illegible] cable to list spe[illegible] tions including [illegible] national publicat[illegible] tional Labour Of[illegible]

The substantial declines in the proportion of old people (sixty-five years of age and over) at work, which have been noted in earlier decades, continued through 1950, in the United Kingdom, for example, the proportion of older men at work has declined from around 60 per cent in 1921 to 32 per cent in 1951, while in Germany this proportion has dropped from 46 per cent in 1925 (Reich) to 27 per cent in 1950 (Federal Republic) Italy recorded the steepest drop, from 72 per cent in 1931 to 33 per cent in 1954 In the United States the more moderate decline was from about 60 per cent in 1920 to about 40 per cent in 1940, at which level it held steady through 1950 In the less developed countries, on the other hand, the proportion of old people at work still remains very high For example, around 1950 the respective proportion of old men stood as high as 83 per [illegible]

sixty-five years of age and over are low in most countries, generally falling between 5 and 15 per cent; they have not declined as sharply over recent decades as those for males

The decrease in the proportion of old people who remain in the labour force has roughly offset the increas-

*Table 1*

LABOUR FORCE BY ECONOMIC SECTOR [a]

*Current data*

| Country | Year | Total labour force—in thousands | Per cent of labour force in | | |
|---|---|---|---|---|---|
| | | | Agriculture | Industry | Trades services etc |
| *Africa* | | | | | |
| Egypt | 1947 | 6,729 [b] | 65 4 | 12 4 | 22 2 |
| Union of South Africa | | | | | |
| White population | 1951 | 956 [b] | 15 2 | 32.8 | 52 0 |
| Others | 1946 | 4 061 [b] | 55 4 | 19 3 | 25 3 |
| *America* | | | | | |
| Canada | 1951 | 5,219 [b] | 19 3 | 36 0 | 44 7 |
| United States | 1950 | 58,442 [b] | 12 5 | 37 0 | 50 5 |
| Argentina | 1947 | 6,066 [b] | 26 7 | 30 1 | 43 2 |
| Brazil | 1950 | 17,071 [b] | 60 7 [c] | 13 1 [c] | 26 2 |
| Mexico | 1950 | 7,943 [b] | 60 8 | 16 8 | 22 4 |
| *Asia* | | | | | |
| India | 1951 | 139,339 | 73 9 | 9 9 | 16 2 |
| Japan | 1954 | 39,930 [b] | 45 2 | 22 3 [d] | 32 5 [d] |
| Pakistan | 1951 | 21,551 [b] | 79 5 | 7 6 | 12 9 |
| Thailand | 1947 | 8,882 [b] | 85 8 | 2 4 | 11 8 |
| *Europe* | | | | | |
| Austria | 1951 | 3,308 [b] | 32 6 | 37 6 | 29 8 |
| Belgium | 1947 | 3,382 [b] | 12 5 | 50 2 | 37 3 |
| France | 1954 | 19,220 | 27 5 | 37 2 | 35 3 |
| Germany (Fed Rep) | 1954 | 24,643 | 20 6 | 46 4 | 33 0 |
| Italy | 1954 | 20 537 [b] | 41 2 | 31 4 | 27 4 |
| Netherlands | 1947 | 3,767 [b] | 19 8 | 34 2 | 46 0 |
| Spain | 1950 | 10,621 [b] | 49 6 | 25 5 | 24 9 |
| Sweden | 1950 | 3,082 [b] | 20 5 | 41 1 | 38 4 |
| Turkey | 1950 | 12,718 | 85 7 | 7 4 | 6 9 |
| United Kingdom | 1951 | 23 045 [b] | 5 3 | 49 2 | 45 5 |
| *Oceania* | | | | | |
| Australia | 1954 | 3 664 [b] | 13 5 | 40 6 | 45 9 |

For fuller list of countries see International Labour Organisation, *Year Book of Labour Statistics*, 1955, table 4

[a] "Agriculture" comprises agriculture, forestry, hunting and fishing "Industry" comprises mining and quarrying, manufacturing, construction and utilities (electricity, gas and water) "Trades, Services, etc" comprises commerce, transport, storage and communications, as well as public and private services

[b] Excluding persons 'not adequately described" and/or "unemployed" and "seeking work for the first time"

[c] Mining and quarrying is included with "Agriculture"

[d] Electricity, gas and water is included with "Services"

ing relative number of old people in the population In consequence, persons aged sixty-five or over have continued to make up about the same share of the labour force as in earlier decades—roughly 5 per cent in many countries

Table 1 presents, for twenty two countries, the distribution of the labour force (in absolute numbers and in percentages) into the three main sectors of economic activity agriculture, forestry, hunting and fishing (or "primary" sector), mining and quarrying, manufacturing, construction and public utilities (or "secondary" sector), commerce, transport, communications and services (or "tertiary" sector)

The well known wide differences between the economies of the various countries are clearly apparent while agriculture in the United Kingdom occupies only 5 per cent of the labour force, 70 to 80 per cent or more of the working population is to be found in agriculture in less well de... akistan (79 5), Thaila... tries that are highly ... by the large propor... tiary sector thus m... e than half of the working population of the United States is in this sector, and 46 per cent in the Netherlands Nevertheless, in regard to the distribution of the non agricultural labour force between the secondary and tertiary sector, table 1 shows that there is greater concentration in the tertiary sector in the less developed countries than in the more developed countries However, the tertiary sector in less developed economies tends to be inflated by petty trades and services of a nature different from that of the highly specialized service activities making up the tertiary sector in countries like the United States or the United Kingdom Some indications on the changing structure of the labour force in the world are given in the paragraphs below relating to employment

The percentage breakdown of the employed population in the USSR in 1955 has been given as follows [1]

| | Per cent |
|---|---|
| Industry (large and small scale) and construction | 31 |
| Agriculture and forestry | 43 |
| Transport and comm... | 6 |
| T... | 5 |
| E... | 9 |
| h... | 6 |
| TOTAL | 100 |

According to estimates based on data derived from the same source, the labour force of the USSR amounted in 1955 to about 80 million people, or 40 per cent of the total population [2]

Table 2 shows the distribution of the working population into employers and workers on own account, unpaid family workers and employees in twenty five selected countries in or around 1950 Because of substantial inter country differences in the concepts employed, comparisons between individual countries are not always meaningful, for instance, the fact that the figures on unpaid family workers for Pakistan and on employees for the Philippines are out of line with the respective figures for countries of similar socio-economic framework is certainly due in great part to special national definitions and census classifications On a regional basis, however, or in relation to broad inter-country differences in the degree of economic development, the data reveal interesting facts

One of the major characteristics of any society—whether from a social, economic or political point of view—is the relative importance of the group of employees, i e, wage earners plus salaried employees In Australia this group forms about four fifths of ... the employees' share of the labour force is well above 70 per cent, while in Brazil and Mexico it lies around 50 per cent In six out of the nine European countries surveyed, the relative importance of employees ranges between about 65 and 70 per cent—the exceptions are Italy with 60 per cent, and Sweden and the United Kingdom with 77 and 93 per cent respectively

While in industrialized America, Europe and Oceania, employees account for two thirds to four fifths of the total working population, they are of considerabl... importance in predom... Asia ... suggest ... wage earners and salaried employees combined account for around one fifth to one third of the working population, except in countries with extensive plantation labour like Ceylon and the Federation of Malaya, where the figure is about one half or more Even in an Asian co... for the Union of South Africa relates to the white population only

Where the proportion of emplo... ...se categories are thus more important in Africa and Asia than in other regions, and taken as a whole they often constitute as much as two thirds to four fifths of ... from 15 to 20 per ... the labour force, however, this proportion falls to as little as 7 2 per cent in the United Kingdom It ... than that of employees

[1] *Narodnoe Khozyaistvo SSSR* p 187

[2] *Ibid*, p 190

*Table 2*

LABOUR FORCE BY STATUS

| Country | Year | Total labour force—in thousands | Per cent of labour force: Employers and workers on own account | Unpaid family workers | Employees |
|---|---|---|---|---|---|
| *Africa* | | | | | |
| Algeria | | | | | |
| Moslem population | 1948 | 3,156 | 25 1 | 74 9 | |
| Europeans | 1948 | 332 | 25 9 | 74 1 | |
| Egypt | 1947 | 6 531 [a] | 37 0 | 20 9 | 42 1 |
| Morocco | | | | | |
| Indigenous population | 1952 | 2,899 | 68 0 | | 32 0 |
| Union of South Africa | | | | | |
| White population | 1951 | 984 | 18 7 | 2 4 | 78 9 [b] |
| *America* | | | | | |
| Canada | 1951 | 5,300 | 19 5 | 3 2 | 77 3 [b] |
| United States | 1950 | 60,037 | 15 9 | 1 9 | 82 2 [b] |
| Argentina | 1947 | 6 333 [a] | 22 9 | 2 9 | 74 2 [b] |
| Brazil | 1950 | 17,081 | 32 2 | 17 0 | 50 8 |
| Chile | 1952 | 1,997 | 23 8 | 3 0 | 73 2 |
| Mexico | 1950 | 8,272 | 41 9 | 11 8 | 46 3 [b] |
| *Asia* | | | | | |
| India [c] | 1951 | 139,339 | 51 7 | 27 0 | 21 3 |
| Japan | 1954 | 40,580 | 25 9 | 35 5 | 38 6 [b] |
| Pakistan | 1951 | 21,998 [a] | 83 4 | 0 4 | 16 2 |
| Philippines | 1948 | 7,416 | 29 8 | 22 1 | 48 1 [b] |
| Thailand | 1947 | 8,992 | 33 6 | 55 5 | 10 9 |
| *Europe* | | | | | |
| Austria | 1951 | 3,344 [a] | 17 6 | 17 7 | 64 7 [b] |
| Belgium | 1947 | 3,481 | 22 2 | 6 4 | 71 4 |
| France | 1954 | 19,201 [a] | 20 6 | 13 1 | 66 3 [b] |
| Germany (Fed Rep ) | 1950 | 22,074 | 14 8 | 14 4 | 70 8 |
| Italy | 1954 | 19 913 [d] | 24 2 | 15 4 | 60 4 [b] |
| Netherlands | 1947 | 3,848 [a] | 18 7 | 10 5 | 70 8 [b] |
| Spain | 1950 | 10,660 [a] | 22 2 | 11 2 | 66 6 |
| Sweden | 1950 | 3 105 | 19 3 | 3 9 | 76 8 |
| United Kingdom | 1951 | 23 181 | 7 2 | 0 3 | 92 5 [b] |
| *Oceania* | | | | | |
| Australia | 1954 | 3 693 [a] | 17 9 | 0 8 | 81 3 [b] |

[a] Excluding " persons of undefined status "

[b] Including " unemployed "

[c] Figures include earning dependants

[d] Excluding 1,429 000 persons, mostly women, working only occasionally in agriculture

The differences in the definitions of unpaid family workers used in the various countries somewhat impair the conclusions concerning the proportion of these workers in the labour force It is nevertheless certain that unpaid family workers generally work for persons who are classified as workers on own account rather than for employers, and in countries where workers on own account are relatively numerous—as in most of the under-developed countries with their large agricultural populations—it is therefore normal that unpaid family workers should also play an important part in the labour force—and *vice versa* (The low figure in table 2 for family workers in Pakistan—and possibly also that for Chile—may be due to the fact that census procedures exclude large numbers of persons who in other countries would be counted as unpaid family workers )

These inter-regional differences in the status distribution of the labour force partly reflect the different levels of industrialization and mechanization attained in the various parts of the world The mechanization of agriculture, for example, and its resulting increased produc-

tivity entail the departure of marginal workers, i e , unpaid family workers, such as the aged and the wives, from the labour force, while others tend to leave agriculture to become employees in the cities At the same time the shift from small scale family production for own use to larger scale factory production for the market as well as the subsequent expansion of the tertiary sector, especially transport, commerce and government, transforms many workers on own account and small employers into employees As a result the proportion of employees in the total labour force rises Depending on the circumstances and the country concerned, this evolution is more or less advanced The countries surveyed in table 3 include some that are highly industrialized, and others where economic development has hardly begun hence, the conspicuous discrepancies in the distribution of the labour force by status

While, in countries with an advanced economy on which information is available the general increase in the proportion of employees has been associated with expanding industry and expanding services, in agriculture the proportion of employees (as well as of unpaid family workers) has declined with the over all decline in agricultural employment and the mechanization of agriculture Employees and unpaid family workers have left agriculture faster than have employers and workers on own account, so that the relative importance of the latter has increased The proportion of the labour force in agriculture represented by employers and workers on own account increased, in Sweden, from 45 per cent in 1940 to 55 per cent in 1950 in Australia from 49 per cent in 1933 to 59 per cent in 1947, in Belgium from 42 per cent in 1930 to 55 per cent in 1947, in the United States from 56 per cent in 1940 to 60 per cent in 1950, and in Canada from 57 per cent in 1941 to 60 per cent in 1951 [6] Thus with the process of economic expansion in these countries, the structure of agriculture, on the one hand, and the structure of industry and services on the other hand, have been changing in opposite directions

## Young workers in the labour force

### *Child workers (below fifteen years of age)*

The available statistical evidence suggests that the employment of young children is now practically non existent in the industrial nations of the world In other parts of the world, however, with largely pre industrial patterns of society, widespread dependence on children for work, generally in small family enterprises, and especially on family farms, is still prevalent

Despite the many limitations of the data available, broad indications of the importance of child labour in different parts of the world may be given It should, however, be borne in mind that the work attachment of children is generally much looser than in the case of adult workers in consequence, many working children included in the statistics probably take up work only during peak seasons, or otherwise perform incidental chores

In Northern America, Northern and Western Europe, Australia, Japan and New Zealand working children below the age of fifteen represent a very small fraction (1 per cent or less) of the labour force In Southern Europe, this fraction is greater 4 per cent in Portugal, Spain and Yugoslavia In Africa, Egypt reports a share of over 10 per cent, while for the non white population in South Africa, it is about 14 per cent In much of Latin America, child workers constitute well over 5 per cent of the total working population In Asian countries, with the exception of Japan noted above, the employment of children is believed to be fairly widespread, although statistics are available for only a few countries

Regarding the ratio of working children to all children, or work participation rate, a similar picture is obtained In most of the industrialized European countries, where a minimum school leaving age of fourteen years and above is common, the participation rate for ages below fourteen appears to be negligible This is also true of Japan

The participation rate for young children in the more

it declined from 25 7 in 1911 to 8 5 in 1946, in Australia from 16 0 in 1911 to 3 3 in 1947, and in the United States the same rate for the age group ten to thirteen years dropped from about 17 per cent at the beginning of the twentieth century to a negligible figure by 1940

In the less developed countries, on the other hand, participation in work by young children is still relatively high Egypt (1947) reported a participation rate of 45 per cent for boys in the age group 10-14, the corresponding figure for Brazil (1950) was stated to be 31 per cent and 9 per cent for girls In India, the results of sample inquiries for the year 1953 indicate work participation by about one third of all children in the age group 10-14 in rural areas, the corresponding proportion in the urban areas was about one eighth Since the proportion of children aged 5 14 enrolled in school has increased significantly in the under-developed countries in recent years (see chapter V), it can be assumed that there has been some decrease in employment of this age group since 1950

### *Young workers (fifteen to nineteen years of age)*

The minimum school leaving age fixed by law seldom exceeds fifteen years In a few countries—notably in North America—prolongation of school attendance for further studies is fairly common, so that a significant proportion of the young people in the age group from fifteen to nineteen stay outside the labour force

In the USSR, the extension of the period of compulsory education from seven to ten years, now being carried out, means that young persons under seventeen will

[6] See *International Labour Review* vol LXXIV, No 2, August 1956, pp 181 184

It may be added enrolment suggest lump in the number of young persons annually entering the Soviet labour force, as a result of low birth-rates during the Second World War and for some years afterwards In many other countries—notably in Europe—most young people enter the labour market after a more limited period of schooling, often as apprentices, and are thus included as part of the labour force In these countries, the work participation rate for young people is consequently relatively high and in some cases is not far short of that of adults In other parts of the world, other factors, such as cultural patterns, lack of opportunities for gainful work, etc, have a more decisive influence the prevalence of relatively low participation rates for young people in certain Asian countries springs in great measure from these factors, rather than from the effects of the prolongation of schooling

The proportion of the total labour force composed of young workers up to the age of nineteen (including working children) is as follows in a few typical countries 6 per cent in the United States, 10 per cent in the United Kingdom, 15 per cent in Italy, 12 per cent in Japan, 25 per cent in Egypt As may be expected in the light of the preceding discussion, the inter-country differences in this respect are relatively great

### Women in the labour force

The statistics of working women are highly susceptible to variations in national statistical reporting and clas-

such workers from the "economically inactive' population This is an area of labour force statistics which often defies the application of more uniform concepts in the differing conditions of the various countries The error thus introduced must not be lost sight of in the appraisal of inter-country differences revealed by the statistics, but need not stand in the way of certain general conclusions

For men, the primary factor which determines the over all work participation rate in the labour force is the age structure of the male population, the role of other factors is secondary except at relatively young and old ages In the case of women, on the other hand, cultural, social and economic elements often overshadow the demographic features

Examples of the supreme role of cultural patterns and social values are provided by certain Moslem countries like Egypt, and certain Latin American countries and Spain, where culture and tradition discourage participation by women in economic activities In consequence, work participation rates of women in these areas are generally very low Cultural attitudes to a varying extent affect the rate of work participation of women (particularly married women) in more industrialized countries also

Where there is no social bar to women's work, economic factors often prove decisive Two of the more important, somewhat interdependent, economic factors are the relative importance of agriculture in a country's economy and the dominant pattern of economic organization—whether the production of goods and services is mainly organized in large establishments or whether small (especially family-run) enterprises predominate In the latter case, it is relatively common for the bread winner to draw on the assistance of family members, including his wife and other dependent female relatives, in the running of the family enterprise In these conditions, women tend to acquire "working" status more freely

In many highly industrialized countries where factory type production is the general rule, large sectors of handicrafts, commerce and services, organized in small units, and run as family enterprises, often coexist with the large factories Inter country differences in the proportion of working women are then influenced—apart from differences in national definitions and classifications referred to above—by the varying importance of these sectors

The traditional pattern in agriculture, which is still widespread, is the cultivation of small holdings, largely with the aid of family labour Hence, other things being equal, countries with a larger agricultural sector would tend to show higher work participation rates for women

Table 3 shows the proportion of the total labour force that is composed of women Certain inter-country differences are largely due to differences in the statistical treatment of the important group of female family workers which in some countries comprised all wives of farmers, whereas in others more restricted definitions were used Nevertheless, the low feminine component of the labour force in Egypt and Pakistan undoubtedly reflects to a greater or less extent the respective cultural patterns with regard to work by women The effect of the cultural pattern is brought out by the fact that economic conditions in these countries are not vastly different from those in Thailand and Turkey Among countries with broadly similar cultural patterns, the importance of the economic factors is evident, as for example in the relatively higher proportion of economically active women in European countries compared to that in Australia, Canada and the United States, where, among other things, agriculture is highly mechanized and the traditional family operated sector in commerce and services is rather small

Increased employment of women is an inherent part of the manpower and employment policies of the USSR and other Eastern European countries, adopted with a view to providing a locally available additional labour force for rapidly growing industry For example, in Czechoslovakia, the proportion of women employed in industry and services in 1954 reached 36 per cent of the total labour force employed in these branches of economic activity [6] In the USSR, women in 1955 made up 45 per cent of the total number of manual and non manual workers—presumably excluding collective farms and handicrafts co operatives [7]

[6] *Czechoslovak Economic Bulletin*, 1 March 1955

[7] *Narodnoe Khozyaistvo SSSR*, p 191

*Table 3*

PERCENTAGE OF WOMEN IN THE TOTAL LABOUR FORCE

| *Country* | *Year* | *Percentage of women in the total labour force* |
|---|---|---|
| *Africa* | | |
| Egypt | 1947 | 13 5 |
| Union of South Africa | | |
| White population | 1951 | 21 8 |
| Others | 1946 | 30 2 |
| *America* | | |
| Canada | 1951 | 22 1 |
| United States | 1950 | 27 5 |
| Argentina | 1947 | 19 9 |
| Brazil | 1950 | 14 6 |
| Mexico | 1950 | 13 6 |
| *Asia* | | |
| India | 1951 | 29 1 [a] |
| Japan | 1954 | 41 3 |
| Pakistan | 1951 | 5 8 |
| Thailand | 1947 | 47 9 |
| *Europe* | | |
| Austria | 1953 | 39 3 |
| Belgium | 1947 | 23 6 |
| France | 1954 | 34 8 |
| Germany (Fed Rep ) | 1954 | 37 3 |
| Italy | 1954 | 25 4 |
| Netherlands | 1947 | 24 4 |
| Spain | 1950 | 15 8 |
| Sweden | 1950 | 26 4 |
| Turkey | 1950 | 44 4 |
| United Kingdom | 1951 | 30 8 |
| *Oceania* | | |
| Australia | 1954 | 22 8 |

[a] Including earning dependants

## EMPLOYMENT, UNEMPLOYMENT AND UNDEREMPLOYMENT

The production and distribution of the world's economic goods and services—foodstuffs, clothing, shelter, health services, government and all the rest—is the responsibility of approximately a thousand million persons, who constitute the world's labour force In the long run the number of the employed increases along with the population, and is one of the important factors influencing the level of production It should be borne in mind, however, that increases in the labour force sometimes permit employment and unemployment to expand simultaneously

### *Employment*

The absolute level of employment since the war has shown an irregular upward trend The major interruptions were in 1949, when declining or stagnant employment in many countries reflected slackening business activity, and in 1953, when employment levels in a number of countries were adversely affected by the tapering off of rearmament programmes and by a variety of other factors The acceleration of economic activity that followed the outbreak of the Korean war caused a rise in the level of employment in 1951, while unprecedented peacetime demand has produced record or near record employment in 1955 in most of the countries for which statistics are available

The extent of the increase from 1948 to 1955 varied from country to country, as would be expected, and also by segment of the working population In general, the gains in non manufacturing activities (including mining construction, trade, services, etc ) appear to have been greater than the gains in over all employment, while employment in agriculture increased but little or actually decreased

Information covering all employment during the period is available for only six countries among these the median increase from 1948 to mid 1956 was 9 per cent Data on wage and salary earners in non agricultural employment for seventeen countries showed a median increase of 18 per cent For twenty six countries, some of which are included in the groups mentioned above, information is available for manufacturing alone Employment data for all these countries appear in table 4

*Table 4*

EMPLOYMENT INDICES

(1948 = 100)

| *Country* | *1949* | *1950* | *1951* | *1952* | *1953* | *1954* | *1955* | *Monthly data* *Month* | *1955* | *1956* |
|---|---|---|---|---|---|---|---|---|---|---|
| | *Civilian labour force employed (total)* | | | | | | | | | |
| Canada [a] | 95 | 94 | 98 | 99 | 100 | 99 | 102 | Aug | 108 | 111 |
| Hawaii | 92 | 92 | 100 | 101 | 101 | 101 | 102 | May | 100 | 102 |
| Japan | 104 | 103 | 105 | 108 [b] | 113 | 114 | 119 | Aug | 120 | 124 |
| Puerto Rico | | 104 [b] | 100 | 93 | 92 | 90 | 93 | Apr | 98 | 99 |
| United Kingdom [c] | 101 | 102 | 103 | 103 | 103 | 105 | 106 | July | 107 | 107 |
| United States | 99 | 101 | 103 | 103 | 105 | 103 | 106 | July | 109 | 111 |

*Table 4* (continued)

| Country | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | Monthly data: Month | Monthly data: 1955 | Monthly data: 1956 |
|---|---|---|---|---|---|---|---|---|---|---|
| *Wage earners and salaried employees (excl agriculture)—general level* | | | | | | | | | | |
| Australia | 103 | 107 | 111 | 100 | 108 | 112 | 115 | July | 115 | 117 |
| Austria | 101 | 102 | 105 | 103 | 102 | 106 | 112 | July | 115 | 119 |
| Belgium [*] | 95 | 97 | 101 | 100 | 99 | 99 | 103 | | | |
| Canada | 100 | 102 | 109 | 112 | 114 | 110 | 113 | July | 116 | 124 |
| France | 102 | 102 | 105 | 105 | 104 | 105 | 107 | June | 108 | 109 |
| Germany (Fed Rep) | 102 | 106 | 113 | 117 | 122 | 128 [*] | 135 [*] | March | 130 | 139 |
| Guatemala | 100 | 100 | 99 | 97 | 95 | | | | | |
| Japan | 99 | 102 | 112 | 117 [*] | 121 | 124 | 131 | Aug | 131 | 145 |
| Luxembourg [*] | 107 | 106 | 110 | 114 | 117 | 119 | 126 | July | 132 | 134 |
| Netherlands | 104 | 109 | 112 | 111 | 114 | 120 | | | | |
| New Zealand | 102 | 104 | 106 | 108 | 111 | 114 | 118 | Apr | 117 | 121 |
| Norway | 103 | 105 | 106 | 107 | 109 | 112 | 113 | June | 115 | 116 |
| Philippines | *100* | *99* | *101* | *104* | *108* | *109* | *112* | Jan -Mar | 112 | 115 |
| Puerto Rico [*] | | *102* [*] | *100* | *96* | *94* | *93* | *99* | Apr | 99 | 101 |
| Saar | 105 | 111 | 116 | 120 | 124 | 126 | 129 | July | 129 | 132 |
| United Kingdom [*] | 101 | 102 | 104 | 103 | 104 | 106 | 108 | July | 108 | 109 |
| United States | 97 | 101 | 107 | 109 | 112 | 109 | 112 | July | 113 | 115 |
| *Wage earners and salaried employees—manufacturing employment* | | | | | | | | | | |
| Argentina [*] | 99 | 97 | 98 | 94 | 88 | 89 | 92 | July | 94 | 93 |
| Australia | 101 | 106 | 109 | 104 | 105 | 110 | 113 | July | 113 | 114 |
| Belgium [*] | 94 | 94 | 101 | 97 | 96 | 96 | 99 | | | |
| Canada | 100 | 101 | 108 | 109 | 113 | 108 | 109 | July | 111 | 118 |
| Denmark [*] (Empl) | 104 | 112 | 112 | 107 | 109 | 113 | | | | |
| Denmark [*] (Hrs wkd) | 104 | 112 | 111 | 106 | 106 | 110 | 109 | Aug | 112 | 110 |
| Finland [*] | 101 | 104 | 108 | 103 | 98 | 100 | 104 | Apr | 102 | 106 |
| France | 102 | 103 | 107 | 106 | 104 | 104 | 106 | June | 106 | 107 |
| Germany (Fed Rep) | | | | | | | | | | |
| (Empl) | 106 | 111 | 122 | 125 | 130 | 137 [*] | 147 [*] | March | 142 | 153 |
| (Hrs wkd) | *100* | *109* | *120* | *123* | *128* | *135* | *147* | June | *144* | *155* |
| Greece | | | *120* | *100* | *97* | *101* | *103* | Feb | *103* | *100* |
| Guatemala | | *100* | *100* | *96* | *92* | *90* | | | | |
| Ireland [*] | 106 | 115 | 116 | 114 | 121 | 122 | 119 | | | |
| Israel | 123 | 138 | 139 | 95 [*] | 93 | 100 | 109 | May | 104 | 107 |
| Italy [*] | 99 | 98 | 99 | 98 | 99 | 100 | 101 | May | 101 | 103 |
| Japan | | *100* [*] | *112* | *114* [*] | *114* | *117* | *120* | Aug | *118* | *141* |
| Mexico [*] | 99 | 104 | 106 | 106 | 102 | 98 | 103 | | | |
| Netherlands [*] | 105 | 110 | 110 | 107 | 109 | 114 | 116 | March | 115 | 116 |
| New Zealand | 102 | 105 | 107 | 107 | 108 | 113 | 117 | Apr | 117 | 118 |
| Norway | 104 | 107 | 110 | 109 | 109 | 112 | 114 | June | 116 | 117 |
| Philippines | *100* | *98* | *99* | *99* | *109* | *115* | *116* | Jan Mar | *119* | *120* |
| Puerto Rico | *100* | *107* | *110* | *109* [*] | *110* | *116* | *119* | Apr | *119* | *130* |
| Saar | 109 | 118 | 128 | 134 | 137 | 138 | 143 | July | 143 | 147 |
| Sweden [*] | 99 | 99 | 101 | 99 | 97 | 97 | 99 | Aug | 99 | 100 |
| Switzerland [*] | *100* | *98* | *108* | *110* | *110* | *112* | *117* | Apr June | *116* | *122* |
| Union of S Africa | 107 | 113 | 119 | 121 | 123 | 125 | 128 | July | 127 | 128 |
| United Kingdom [*] | 102 | 105 | 108 | 106 | 108 | 111 | 114 | July | 114 | 114 |
| United States [*] | 91 | 97 | 103 | 103 | 109 | 99 | 103 | July | 102 | 99 |

*General Note* [illegible]
data for [illegible]
*Labour* [illegible]
*of Labo*[illegible]
in each [illegible]
see *Sup*[illegible]
*Explana*[illegible]

[*] Excludes persons temporarily laid off 1949 1952 figures are averages for less than 12 months

[*] Sampling design revised Nov 1952.

[*] Average of last three quarters

[*] Annual data mid-year

[*] Average of Mar and Sept.

[*] Wage earn rs only

[*] New Series Dec 1951 100 wage earners only

[*] July

[*] Average of Jan Sept and Dec

[*] Average of Jan. Aug and Oct. Dec

[*] Oct. except 1954 and 1945 Sept

[*] Wage earners only, incl. mining

A composite employment index based on the weighted figures from twenty three countries with information on manufacturing employment, is presented in table 5, which indicates that the over-all increase in manufacturing employment from 1948 to 1955 was 14 per cent This average increase is reduced somewhat by the relatively small gain in manufacturing employment in the United States, which receives heavy weight in the figures for the twenty three countries combined Separate indices for Western Europe and Oceania reveal striking increases, 16 per cent and 14 per cent respectively

*Table 5*

COMPOSITE INDICES OF EMPLOYMENT IN MANUFACTURING

(1948 = 100)

| | *1948* | *1949* | *1950* | *1951* | *1952* | *1953* | *1954* | *1955* |
|---|---|---|---|---|---|---|---|---|
| Total, 23 countries [a] | 100 | 99 | 102 | 108 | 109 | 111 | 110 | 114 |
| North America | 100 | 93 | 98 | 105 | 107 | 113 | 105 | 108 |
| Western Europe | 100 | 102 | 104 | 109 | 109 | 110 | 112 | 116 |
| Oceania | 100 | 101 | 106 | 109 | 104 | 106 | 111 | 114 |

[a] Includes figures for nine countries in regions not shown separately

Data available for the first part of 1956 for a number of countries show that the upward trend in employment continued in most countries, declines in over all employment in Yugoslavia, in man hours worked in manufacturing in Denmark and in employment in manufacturing in Argentina were recorded, while manufacturing employment in Israel remained unchanged from 1955 levels

The total number of wage-earners (manual and non-manual workers, presumably excluding collective farms and handicrafts co-operatives) in the USSR has been given as follows [8]

| | *Annual averages* |
|---|---|
| 1950 | 38 9 million |
| 1951 | 40 7 |
| 1952 | 42 2 |
| 1953 | 43 7 |
| 1954 | 47 3 |
| 1955 | 48 4 |

*The changing composition of employment*

The divergent trends of employment in the major sectors of the economy have been the subject of frequent comment Such trends are ordinarily analysed in terms of census data and other long run indicators

In view of the general tendency for the labour force to grow, trends in its distribution by economic sector can be distinguished under two somewhat related aspects—changes in numbers and shifts in the percentage distribution As will be seen below, these two trends do not necessarily run parallel

In most countries the percentage share of the " agriculture " (or primary) sector in the labour force has shown a downward trend over a long period In France, Germany, Italy and Sweden—European countries where a relatively high proportion of the working population was engaged in agriculture at the turn of the century—the percentage share of agriculture has been steadily falling since the latter part of the nineteenth century, and at an accelerated pace since 1920 However, the number of agricultural workers continued to rise for a period, reaching peak levels generally around 1920 Since that date the agricultural work force in these countries has declined both in absolute and in proportionate terms

The number of workers in the " industry " (or secondary) sector has in general increased steadily and the same holds true for the proportionate share of the labour force in this sector

In the case of the " service " (or tertiary) sector nearly all countries for which data are available recorded impressive increases both in numbers and in proportionate share In almost all these countries the rate of growth of the labour force in the tertiary sector, owing to the expansion of government services, transportation, distribution, etc , has tended to outpace that in the secondary sector over a long period It is interesting to note that in the United Kingdom the decline in the relative share of agriculture was offset entirely by the increase in services

In the United States, which has experienced a phenomenal increase in its labour force from about 13 million in 1870 to about 58 million in 1950, the agricultural working population increased at a considerably lower rate than that of the total labour force, its share thus falling from 53 per cent in 1870 to 32 per cent in 1910, since the latter date there has been a continuous drop in the absolute number of workers in agriculture, which by 1950 had fallen back to its 1870 level of about 7 million, representing only 12 5 per cent of the total labour force Over the same period (1870 to 1950) there was a sevenfold increase of the work force in the secondary sector and a tenfold expansion in the tertiary sector

For India, the statistics suggest that the share of

[8] *Narodnoe Khozyaistvo SSSR* p 189

where the labour force expanded by well over 10 million workers between 1920 and 1954, agricultural employment grew at a lower rate than the other sectors As a result, the share of agriculture in the labour force has diminished while that of industry and, to a greater extent, that of services has gone up

The drift away from agriculture, which appears to be almost a universal phenomenon, has become a movement of considerable amplitude in the industrial nations of the world The broadening of employment in the [illegible] sectors of these countries not only [illegible] which [illegible] sizable, but in addition involves transfers from agriculture to the other sectors

In the economically less developed countries, where the rates of increase of the labour force are generally greater than in the industrial countries, because of faster population growth, the number of workers in agriculture continues its upward trend, but the proportion of agricultural workers in the labour force is declining This is the case, for example, in Egypt and Mexico Japan, as a somewhat exceptional case, belongs to the same group in this respect, although the process of industrialization has had a longer start and been of a more far-reaching character in that country than in most other countries in this category

A closer study of the distribution of the changes in the labour force in recent years by economic sector helps to explain the modifications in the structure of the economically active population Table 6 gives for each of ten selected countries the changes in the labour force over a recent period and their distribution by economic sector

Six of the ten countries shown—the United States and the five European countries—have had a net outflow of workers from agriculture with the result that the sum of increases in the industry and service sectors is greater than the total labour force increase In France, the only country with a net decrease in total labour force (due largely to the peculiarities of the French demographic situation), there was a drop of nearly 2 million workers in agriculture from 1936 to 1954 In the context of the size of the French labour force this decline appears among the most important. The United States recorded a decline of 2 million workers in the agricultural labour force from 1940 to 1950 Comparison with figures for earlier dates shows that the shrinkage of the agricultural labour force in the United States was accelerated over this period In the other European countries the outward flow of labour from agriculture was less substantial, although in Sweden, relative to the size of her agricultural labour force, this outflow was the highest of all countries

In the European countries, with the exception of Italy, the recent additions to the labour force in the industry sector are larger than in the service sector, pointing to the vigorous industrial expansion in these countries in the post-war period

In the other countries shown in table 6, the increases in the service sector are relatively more important than those in industry This group comprises countries with economic conditions differing as widely as those of the United States and India, and the fact that the service sector absorbs a greater proportion of the additions to the labour force than industry stems from different causes for the various countries For example, in the United States rising productivity in agriculture and industry, already at a very high level compared to that in most other countries, may underlie the continuing growth of the service sector and thus be indicative of a healthy economic progress On the other hand, in the case of India, between 1941 and 1951 the bulk of the additions to the labour force continued to go to agriculture, of the part of the additions which went to the non-agricultural sectors, the share of industry is insignificant compared to that of the service sector The lack of expansion of industry to absorb such additions may be at the root of this phenomenon, and if interpreted in conjunction with other relevant facts, such as the proliferation of petty trades, it may point to the lack of a balanced economic growth over this period

*Table 6*

RECENT CHANGES IN THE LABOUR FORCE BY ECONOMIC SECTOR [a] IN TEN COUNTRIES

| Country | Period | Changes (thousands) | | | |
|---|---|---|---|---|---|
| | | Agriculture | Industry | Services | Total |
| Egypt | 1937-47 | + 90 | + 225 | + 318 | + 634 |
| France | 1936-54 | − 1,924 | + 890 | − 7 | − 1,041 |
| Germany (F R.) | 1939 54 | − 323 | + 3 000 | + 1,910 | + 4 578 |
| India | 1941-51 | + 14,200 | + 300 | + 5,700 | + 20 200 |
| Italy | 1936-54 | − 374 | + 1,079 | + 1,487 | + 2 191 |
| Japan | 1947 54 | + 248 | + 1,171 | + 5,626 | + 7,045 |
| Mexico | 1940-50 | + 998 | + 587 | + 664 | + 2,249 |
| Sweden | 1940-50 | − 232 | + 197 | + 151 | + 116 |
| United Kingdom | 1931-51 | − 105 | + 2,542 | + 956 | + 3,603 |
| United States | 1940-50 | − 1,986 | + 4,063 | + 6,291 | + 8 368 |

[a] See footnote *a* to table 1 on page 92 for definition of sectors

In the USSR and the Eastern European countries reports on the fulfilment of the national plans in spite of certain differences between countries, show a general slackening in the rapid growth of industrial employment which was characteristic of these countries in the post war decade

The yearly percentage increase of industrial employment (compared with previous years) is given as [a]

| | 1952 | 1953 | 1954 | 1955 |
|---|---|---|---|---|
| Bulgaria | 6% | 5% | 4% | 4% |
| Czechoslovakia | 2% | 3% | 2% | 1% |
| Hungary | 10% | 5% | 1% | — |
| Poland | 6% | 6% | 4% | 3% |
| USSR | — | 5% | 6% | 2% |

[a] Sources Plan Fulfilment Reports *Plánované Hospodářství* No. 1 1955

*Unemployment*

Unemployment in most countries has been held within moderate bounds since the war Mounting unemployment was rather general in 1949 50 and again in 1953 54, when a number of countries experienced post war peaks

Table 7 presents unemployment statistics in terms of annual averages as reported by thirty one countries from 1948 to 1956 The wide divergence of unemployment patterns in the individual countries is immediately apparent Nevertheless, there is considerable agreement with respect to periods of peak unemployment nine countries experienced their peak years in 1949 50 and thirteen in 1953 54

Substantial percentage increases in unemployment from 1955 to 1956 were recorded in Australia, Ceylon, Chile, India Ireland Israel and Pakistan, and moderate increases occurred in Norway and the United King

*Table 7*

UNEMPLOYMENT

(In thousands)

| Country | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | Monthly data: Month | Monthly data: 1955 | Monthly data: 1956 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Australia | 2 6 | 10 3 | 1 2 | 0 8 | 16 6 | 24 3 | 6 5 | 2 9 | Aug | 2 2 | 10 2 |
| Austria | 43 4 | 91 2 | 124 8 | 116 2 | 157 0 | 183 7 | 163 8 | 120 7 | July | 70 7 | 67 4 |
| Belgium | 81 0 | 174 0 | 170 0 | 153 5 | 173 6 | 183 6 | 166 9 | 116 5 | Sept | 81 4 | 66 0 |
| Berlin (Western Sectors) | | 192 0 | 288 7 | 281 6 | 272 7 | 232 4 | 190 1 | 145 3 | July | 125 2 | 99 7 |
| Burma | | | 2 0 | 4 1 | 4 8 | 3 6 | 3 1 | 3 1 | June | 3 1 | 2 3 |
| Canada | 111 0 | 141 0 | 185 0 | 126 0 | 155 0 | 162 0 | 247 0 | 244 0 | Aug | 140 0 | 116 0 |
| Ceylon | 53 5 | 68 4 | 68 5 | 56 8 | 51 6 | 52 6 | 56 5 | 67 6 | June | 65 8 | 76 8 |
| Chile | 3 2 | 3 4 | 2 9 | 2 6 | 3 3 | 2 8 | 3 8 | 3 8 | July | 4 0 | 7 0 |
| Denmark | 51 6 | 59 0 | 54 8 | 63.0 | 81 6 | 61 0 | 54 1 | 65 9 | Sept | 39 2 | 38 2 |
| Finland | 3 5 | 25 7 | 19 2 | 5 6 | 8 3 | 29 1 | 18 7 | 9 3 | Aug | — | — |
| France | 77 8 | 131 1 | 152 9 | 120 1 | 131 8 | 180 0 | 183 3 | 158 6 | Aug | 125 4 | 83 1 |
| Germany (Federal Republic) | 591 5 | 1 229 7 | 1,579 8 | 1 432 2 | 1 379 2 | 1 258 6 | 1 220 6 | 928 3 | Aug | 512 4 | 409 4 |
| Hawaii | 9 4 | 21 4 | 17 7 | 8 3 | 8 4 | 9 5 | 11 8 | 9 9 | July | 10 3 | 8 6 |
| India | 224 9 | 293 0 | 314 3 | 338 4 | 384 0 | 477 6 | 562 3 | 647 1 | July | 666 1 | 792 3 |
| Ireland [a] | 35 1 | 34 9 | 30 3 | 30 4 | 38 6 | 43 2 [b] | 37 5 | 32 0 | Sept | 23 5 | 33 1 |
| Israel | | 6 4 | 5 9 | 6 3 | 9 4 | 17 7 | 13 5 | 10 7 | June | 8 8 | 10 8 |
| Italy | 1 742 0 [c] | 1 672 7 | 1 614 9 | 1 721 1 | 1 849 7 | 1 946 5 | 1 958 7 | 1 913 4 | Aug | 1 780 1 | 1 769 4 |
| Japan | 240 0 | 380 0 | 440 0 | 390 0 | 470 0 | 450 0 | 580 0 | 680 | Aug. | 710 0 | 570 0 |
| Luxembourg | * | * | * | * | * | * | * | * | | * | |
| Netherlands | 29 0 | 42 1 | 57 7 | 67 8 | 104 3 | 83.3 | 60 0 | 41 3 | Aug | 28 1 | 20 8 |
| New Zealand | * | * | * | * | * | * | * | * | | * | 0.5 |
| Norway | 9 0 | 7 7 | 9 0 | 11 1 | 11 6 | 14 4 | 12 7 | 12 5 | Aug | 3 9 | 5 3 |
| Pakistan | 78 0 | 71 0 | 96 4 | 103 9 | 107 1 | 93 1 | 88 5 | 103 9 | Aug | 104 9 | 132.3 |
| Puerto Rico | | | 98 0 [c] | 114 0 | 100 0 | 91 0 | 97 0 | 92.0 | Apr | 67 0 | 66 0 |
| Saar | 6 6 | 6 1 | 6 4 | 4 3 | 3 9 | 4 6 | 7 1 | 7 0 | Aug | 6 2 | 5 4 |
| Spain | 117 0 | 160 1 | 166 2 | 144 2 | 106 5 | 107.2 | 122 6 | 112 1 | May | 104 2 | 107 0 |
| Sweden | 25 7 | 26 1 | 22 1 | 18 2 | 22.3 | 27 2 | 25 5 | 24 5 | June | 14 5 | 14 8 |
| Switzerland | 3 0 | 8 1 | 9 6 | 3 8 | 5 3 | 5 0 | 4 3 | 2 7 | Sept | 0 9 | 0 7 |
| Union of S Africa | 12 2 | 15 1 | 16 3 | 10 2 | 12.1 | 12.1 | 13 7 | 12 5 | Aug | 13 6 | 13 5 |
| United Kingdom | 379 3 | 328 4 | 332 1 | 264 1 | 368 4 | 356 3 | 302.9 | 243 5 | Aug | 208 9 | 243 8 |
| United States | 2 205 0 | 3 580 0 | 3 234 0 | 1 996 0 | 1 815 0 | 1 769 0 | 3 451 0 | 2,787 0 | Aug | 2,410 0 | 2 318 0 |

[a] Incl partially unemployed

[b] Beginning Jan 1953 scope of series en

[c] Average of Jan. June and Oct. Dec.

* Less than one hundred

dom In most cases the increases in actual numbers were small In Chile, for example, the registered unemployed increased by only 2,000 in a country where the number of wage-earners and salaried employees outside of agriculture is estimated at more than one million

Unemployment remains extremely low in New Zealand and Sweden, being less than 1 5 per cent of the labour force in both cases, though nevertheless slightly higher in mid-1956 than at mid-1955 levels Measures designed to combat inflation and help correct the balance of payments in Australia and New Zealand are at least partly responsible for the increase in unemployment

In all, somewhat less than half of the countries reported an increase in unemployment from 1955 to 1956, while lower levels of unemployment associated with generally prosperous business conditions and rising industrial production were noted in the other reporting countries In most of the latter countries unemployment in 1955 was already at a low level and the decrease in 1956 was small Among the more substantial decreases were those in Canada, Japan, Belgium, France, the Federal Republic of Germany and West Berlin, and the Netherlands

While unemployment decreased in Japan (and also in Burma) it continued its increase in the three other Asian countries (Ceylon, India and Pakistan) for which data are available However, unemployment reports from Asian countries are incomplete and the number of unemployed still seems small in relation to the vast numbers in the labour force But reported unemployed in some countries may be but a fraction of larger numbers of unemployed who do not get into the statistics In addition, the labour market in Asia is characterized by *underemployment* of serious dimensions

*Underemployment*

In many economically less developed countries underemployment remains a serious phenomenon It arises mainly from the insufficiency of the existing cultivated land and capital equipment to keep the present labour force fully and effectively employed The elimination of underemployment is therefore likely to be a long-term process dependent on the rate of capital formation and economic development During the past few years, while considerable efforts have been made in those countries to expand capital investment and to accelerate development, such efforts have not yet resulted in a substantial increase in employment opportunities for the present underemployed

The phenomenon of underemployment, though generally recognized, does not lend itself to simple description and uniform measurement It manifests itself in different forms under different conditions In agriculture, most readily visible is the extensive seasonal underemployment Because of the small size of the land at their disposal and the shortage of capital, in the majority of less developed countries agricultural production provides the peasants with full time work only for a small part of the workir [illegible] either wasted in [illegible] work which bri [illegible]

areas with an excessively high man-land ratio the local labour force remains under-utilized even at the seasonal peaks of agricultural activity

Underemployment finds expression not only in the partial utilization of the available labour-time but also in the low work intensity and inefficiency of the labour force at work This is particularly noticeable in the handicraft and cottage industries, in petty trades and services Since the entry into these occupations requires comparatively little capital and skill, they have become the main absorber of the increased labour force outside agriculture As a result there is a redundancy of labour, each worker produces and earns much less than he could with his working ability Underemployment also prevails in the modern factory industries in many countries, though to a lesser extent The number of workers employed therein is often greater than is needed, at the existing level of technique, for the output they produce Because of low wages the management has little incentive to raise the standards of labour efficiency

Owing to the complexity of the phenomenon and the difficulties in the way of statistical measurement, there are no accurate data on the extent of underemployment for most of the less developed countries Following is an attempt, nevertheless, to describe briefly the condition of underemployment in certain countries of Asia, the Middle East, Europe and Latin America for which information is available Much of this information, as will be noted, relates to the situation in agriculture Since the economies of those countries are predominantly agricultural and since underemployment in the non-agricultural sectors is traceable mainly to the continuous exodus of surplus labour from the rural districts, facts on underemployment in agriculture would reflect to a considerable extent the conditions of utilization of labour in the country as a whole

In most parts of Asia, agricultural communities suffer from long periods of seasonal underemployment The lack of opportunities to earn adequate supplementary income during those intervals has been one of the major factors accounting for the low living standards of the majority of the Asian peasants, whose incomes from the land are often too small to enable them to meet their essential needs A recent nation-wide field investigation reveals that for India as a whole adult male agricultural labourers were employed on wages (including non agricultural work) for 218 days in the year with regional variations ranging from 289 days in North India to 181 days in South India [10] In the Philippines, an average farmer spends about four months on the land in the case of rice, coconuts or tobacco and six months in the case of corn In 1953 the Central Bank of Ceylon conducted a Consumer Finance Survey of the country, in which detailed information was also sought on the employment [illegible] ample [illegible] of [illegible] 00 [illegible] workers, or 12 per cent, were severely underemployed,

[10] Government of India, Ministry of Labour, *Agricultural Labour Inquiry Report on Intensive Survey of Agricultural Labour*, vol. I, *All India* (New Delhi, 1954) p 30

i e, working below twenty hours a week, and 400,000 workers or 16 6 per cent were involuntarily unemployed Though recent factual data are not available, a similar wastage of agricultural manpower is known to exist in most other Asian countries

Among the Middle Eastern countries, the density of agricultural population is particularly high in Egypt, where the average size of farm is known to be one of the smallest in the world A pre-war estimate put the average area farmed by a peasant family in Egypt at 1 6 acres, whereas in terms of labour requirements a family could cultivate five times that area with the existing methods [11] The condition of chronic underemployment is also widespread in Lebanon, though not so acute as in Egypt In other countries of the Middle East such as Iran, Iraq and Syria, where there is a shortage of agricultural labour in relation to the available cultivable land, underemployment nonetheless exists, owing in part to an irrational distribution of land and defective land tenure and in part to the inefficient organization of work among the agricultural labour force

Underemployment has also reached serious proportions in most parts of Southern Europe In Greece, where the average size of a farm is smaller than in any other European country, according to one estimate, in 1950, disguised unemployment in the countryside affected close to 40 per cent of the population actively engaged in agriculture Similarly, in Southern Italy, employment opportunities have failed to expand as rapidly as the growth of population A recent inquiry showed that more than a third of the rural population in Southern Italy was redundant to the rational requirements of production In Spain, for want of better employment opportunities, most of the additional agricultural labour force brought about by recent population growth became seasonal farm workers One estimate puts the present surplus labour in Spanish agriculture at about two million people or over 35 per cent In Portugal also there is considerable surplus agricultural labour

Certain areas in Latin America are likewise confronted with a serious problem of chronic unemployment and underemployment In the Caribbean area, the problem appears rather acute in Jamaica and Puerto Rico In Jamaica, unemployment persists as a result of population growth, wasteful and poor utilization of land and lack of capital for development In Puerto Rico, a recent labour force survey shows that during 1953 the quarterly average rates of underemployment among men were 40 per cent in agriculture and 14 per cent in non agricultural occupations [12] In Barbados and Haiti there also [illegible] plus labour In [illegible] 5 about one half [illegible] were temporary agricultural wage earners whose average duration of employment in the year was no more than 123 days, and considerable chronic unemployment has been noted even in the busy season of the best years

In Central America, El Salvador and Guatemala are countries where the density of population is already high on the existing cultivated land In El Salvador, pronounced seasonal unemployment is known to prevail not only in agriculture but also among the permanent non agricultural labour force, particularly those engaged in the processing and distribution of agricultural products In Guatemala, according to the provisional figures of the 1950 agricultural census, more than 50 per cent of farm undertakings were smaller than 3 5 acres, on those farms much of the labour force was underutilized

In South America, there is a striking land shortage among the Indians inhabiting the Andean Plateau across Bolivia, Ecuador and Peru In Bolivia, the average area of an Indian *comunidad* family holding in the high plateau region is estimated at 0 8 acres In Ecuador, a field inquiry by the National Welfare Institute revealed that the area of 709 of the 941 holdings [illegible] the increasing land shortage, chronic underemployment has developed into a most acute form in this area

The limited amount of factual data presented above illustrates the condition of underemployment in the economically less developed parts of the world Underemployment in those areas apparently originates in the insufficiency of existing cultivated land to permit full and effective use of the present agricultural labour force Historically, the phenomenon has arisen because, in the past, while the population has steadily increased, there has been no corresponding increase in employment opportunities to take the increased population off the land already under cultivation In these circumstances the growth of population has tended to drag down the average level of living.

### Hours of Work

To complete the picture of the activity of the labour force, it is useful to review the information available on the number of hours of work contributed by persons in employment Up-to-date information on this subject, however, is scarce and the discussion is therefore limited to the situation in the small number of countries for which data are available little is known about trends and actual hours of work in Asia, Africa or Latin America

Average hours of work ("normal hours" plus over- [illegible] ere in [illegible]

[illegible] normal hours of work have generally [illegible]

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[11] See W Cleland, "A Population Plan for Egypt" *Egypte* [illegible] Warriner *Land and Poverty* [illegible]

[12] [illegible] au of Labor Status [illegible] o, *October 1952 to* [illegible] rce No 13, March [illegible] nployment adopted [illegible] ng less than thirty [illegible] work more hours, [illegible] families consume [illegible] id (*c*) self-employed [illegible] tive of the number [illegible] urs.

declined since 1938, this high post-war level of average hours of work reflects a high level of economic activity and cannot be interpreted as evidence of a trend towards longer working hours

Despite several exceptions, the general pattern of international differences in average hours of work is considerably influenced by established "normal" hours The low normal hours in Canada and the United States, for example, were matched by average hours (in manu-

high

A development of current interest which is expected to have an effect on wage levels in the near future is the trend towards a shorter normal working week, which has been increasingly noted in Western Europe Current statistics of average hours actually worked have not yet reflected this trend—and are unlikely to do so in a period of full employment—but the tendency is nevertheless important

In the USSR, the directives of the 20th party congress provide for the reduction of the working day of all manual and non manual workers from eight to seven hours under the sixth Five-Year Plan In addition it is planned to introduce a six-hour working day for under ground workers in the key trades of the coal and ore-mining industry and to reintroduce a six-hour working day for young persons The working hours of manual and non manual workers have already been reduced to six hours on Saturdays and the days before national holidays with effect from 10 March 1956 [13] The working day for young persons under sixteen years of age, whether they are still at school or have started work, is fixed at four hours [14] Measures to shorten hours of work in industry, and in particular in mining, have been announced (and partly adopted) in Poland and in some other countries of Eastern Europe

The average hours of work for individual industries often differ widely from each other and from the average for all manufacturing There is some indication of consistent patterns from industry to industry, but these patterns appear to vary considerably from country to country

The economic problems of the textile industry, including post-war shortage of materials, seasonality, declining demand and other factors, are reflected in lower-than-average hours of work in many countries The revival of German industry after the post-war low contributed to a substantial increase of average hours of work in the German metal and chemical industries

The construction industry is in a unique position In countries such as Canada and the United States, where the building trades are highly unionized and tend to occupy a privileged position in the employment market, average hours of work were significantly lower than in manufacturing Despite the building boom in both countries, the effect of low normal hours of work (as few as thirty per week in some trades and cities in the United States) and high overtime premiums (starting at time-and-a-half) has been to limit average hours actually worked On the other hand, in those European countries where the building industry has been under pressure to repair war-time damage in addition to meeting new demand, where normal hours are often the same as in manufacturing, and where overtime premiums are relatively low (often time-and-a-quarter), average hours of work have been substantially higher than in manufacturing in recent years

By and large, hours of work in mining have been stable in the post-war period Hours have been stable or declining in inland transport, with the exception of the United Kingdom

### *Annual holidays with pay*

The rapid growth of legislation on annual holidays with pay is one of the interesting examples of the progressive improvement in conditions of work which has occurred in many countries during the years since the Second World War While in 1936 no more than fourteen countries had established the legal right of workers and employees in industry and commerce to annual vacations with pay, provisions for such holidays are now found in the legislation of at least fifty-four countries The principle of the right to paid holidays has been written into the Constitutions of more than a dozen countries As new States came into being, holiday legislation was enacted

The minimum duration of the annual holiday with pay has increased in many cases during the post war years An annual vacation of one week, which was the prevalent form before the war, is now exceeded in an increasing number of countries Workers in more than twenty-five countries are now entitled to an annual holiday of twelve working days or two weeks, while longer vacations are provided for in certain countries, notably those in Scandinavia and some in Latin America The trend towards longer holidays is also noticeable in countries where working conditions are fixed by collective agreements or other means Moreover, longer holidays for workers who have had a certain number of years of employment, or for those working in dangerous or unhealthy occupations, also constitute a distinctive trend in some areas

It should be noted, however, that hundreds of thousands of workers in certain regions of the world still do not enjoy the right to an annual holiday with pay, although that right is now generally recognized as an important condition of work

## Consumer prices

Following a period of remarkable stability, extending from mid-1952 until early 1955 or later, consumer prices in much of the world are again manifesting a definite upward trend which may be regarded as a threat to economic well being The increase of prices has not

[13] Information on the rise in the material well being and cultural level of the workers of the USSR, submitted by the Government of the USSR to the United Nations on 10 May 1956, p 9

[14] *Ibid.*, p 12.

yet attained troublesome proportions in most countries, but from mid-1955 to mid-1956 consumer prices advanced almost twice as fast, on the average, as during the preceding twelve months

The stability which was so prevalent from 1952 to 1955, and in many countries extended over a longer period, followed a period of price increases which in magnitude [illegible] From [illegible] data for [illegible] ent In ten countries the purchasing power of the consumers' money shrank to 6 per cent or less of its pre-war level, while only ten countries reported that their money retained [illegible]

[illegible] per cent), Canada (85 per cent), Panama (86 per cent), Venezuela (87 per cent), the Union of South Africa (91 per cent), the United States (91 per cent), Sweden (94 per cent), and Southern Rhodesia (97 per cent)

During this period, price movements in the various countries manifested great variety, not only with respect to the magnitude of the change but also with respect to its timing In most countries, the sharpest increases were experienced during the war, this was particularly true in countries that were the scene of armed conflict Reduction of wartime pressures and the imposition of strict economic controls enabled many of them to overcome the worst phase of inflation and to attain a measure of price stability during the late 1940's and the early months of 1950

A new wave of inflation, stemming in some cases from the Korean war and defence production and in others from expanding investment programmes, pushed prices sharply upward again in much of the world after the middle of 1950 This movement affected not only countries where prices had risen appreciably, but also a number of countries that had been able to control prices fairly effectively during the war In all, sixteen countries reported greater price increases during the seven post-war years (1946-53) than during the seven war years (1939-46) Among these were Argentina, Australia, Bolivia, Canada, Chile, New Zealand, Paraguay, Peru and Sweden

By mid-1952, however, the sharp upward price movement of the early 1950's had run its course Price stability was not attained by all countries, but by a substantial majority, including especially the countries of Western Europe, North and Middle America, Africa and Oceania During the thirty months from July 1952 to January 1955, consumer prices in Belgium, Canada, Finland, France, Luxembourg, Sweden, Switzerland and the United States, among others, rose by 2 per cent or less, or in some cases declined slightly Most other countries displayed only modest gains (or losses) Even in this period of exceptional stability, however, prices continued to rise rapidly in a number of Asian and South American countries The increase in the thirty-month period amounted to 517 per cent in Bolivia, 169 per cent in Chile, 153 per cent in Paraguay and 152 per cent in the Republic of Korea All of these countries have suffered from severe inflation over a period of a decade or more

An appreciable upturn in consumer prices was experienced by [illegible] movemen[illegible] The medi[illegible] reporting [illegible] per cent as compared with 1 8 per cent from 1954 to 1955 The number of countries reporting stable prices (i e, net changes within limits of approximately 2 per cent) dropped from forty-one in 1954-55 to thirty-one in 1955-56, while the number reporting increases in excess of 3 per cent rose substantially Only seven countries reported price decreases in 1955-56 as compared with twenty-one in 1954-55

Price increases were most extensive in Asia and South America, as has been the case for several years Significant increases were also recorded in Europe and Oceania, however, where the contrast with the preceding year was marked

In general, price movements in *Asia* and the *Near East* have been extremely erratic Some of these countries, such as China Taiwan, Indonesia, the Republic of Korea, Laos and Viet-Nam, have undergone marked inflation in recent years, although China Taiwan, Laos and Viet-Nam attained relative stability in 1954, others, like India, the Federation of Malaya and Pakistan, have had rather stable prices, trending slightly downward Some of the Near Eastern countries, including Iraq, Lebanon and Syria, experienced marked declines in prices during the post-war period

During the past year a variety of price movements was still in evidence Burma and the Republic of Korea both reported price increases of 28 per cent from mid-1955 to mid 1956 (representing a moderation of inflationary forces in the case of Korea), while Indonesia, Syria and Turkey also reported increases of 15 per cent or more Viet-Nam (14 per cent) and India (13 per cent) both experienced sharp increases in consumer prices On the other hand, Ceylon, the Federation of Malaya, Japan and the Philippines and several other Asian countries witnessed little price change during the same period

In *South America*, Bolivia, Brazil, Chile and Paraguay have long suffered from inflationary prices Of these countries only Brazil and Chile have published recent price data, and the large increase reported by Chile for 1955-56 was somewhat smaller than in 1954-55

In *Europe* no country has reported a condition of pronounced inflation, but only France, Luxembourg, the Netherlands and Switzerland held price increases below 3 per cent in 1955-56 In the United Kingdom prices rose by 5 per cent in the twelve months ending in June 1956 All of the northern countries witnessed increases of 6 per cent or more, and in Finland, where a tax reduction and increased food subsidies had brought about a drop in price levels at the end of 1954, the increase was 11 per cent Among the other larger increases were those of Iceland, Spain and Yugoslavia

From 1947 to 1954 the USSR followed a policy of annual reduction of State retail prices Price [illegible] tions have, in fact, been used as an altern[illegible]

increases in raising levels of living Prices have been brought down to a level about two fifths above that prevailing before the Second World War

*State retail prices as percentage of 1940 mid year prices* [a]

| | *1950* | *1951* | *1952* | *1953* | *1954* | *1955* |
|---|---|---|---|---|---|---|
| All goods | 186 | 170 | 161 | 146 | 138 | 138 |
| Foodstuffs | 203 | 181 | 166 | 146 | 141 | 141 |
| Other | 165 | 157 | 156 | 145 | 134 | 134 |

[a] *Narodnoe Khozyaistvo SSSR,* p 210

The same source, taking 1947 as the base year, indicates price reductions for all goods from 100 to 43 in 1954, and for foodstuffs from 100 to 38 The prices of some consumers' goods (white bread, tea, medicines, certain manufactured articles) have been reduced below the pre-war level

It may be seen from the above table that there were no price reductions in 1955 This change in policy is explained by the USSR authorities as follows "A proportion of the funds previously earmarked for State expenditure connected with the reduction of retail prices will be used for the implementation of various measures set out in the directives for the Sixth Five-Year Plan of economic development of the USSR (1956 60), which are designed to increase the prosperity of the people, such as increases in wages, allowances and pensions and introduction of free education " [15]

In Poland, where, unlike the USSR, most food is produced and sold through the private sector, retail prices rose rapidly during the period 1950 53 (1949=100) [16]

*State stores*

| | *All goods* | *Foods* | *Other* | *Private food markets* |
|---|---|---|---|---|
| 1950 | 108 0 | 106 7 | 109 4 | 121 0 |
| 1951 | 118 3 | 113 6 | 123 3 | 156 9 |
| 1952 | 132 5 | 138 7 | 127 5 | 239 9 |
| 1953 | 194 6 | 223 6 | 171 0 | 270 0 |
| 1954 | 180 8 | 212 1 | 155 6 | 267 7 |

Since 1953 a policy of regular price reductions has also been adopted in Poland and in other countries of Eastern Europe The extent of these reductions has varied from one country to another, and in several countries, including Poland, reductions in food prices have been smaller than reductions in prices of manufactured goods Certain price reductions were effected in Romania in December 1955, and in February retail prices in Bulgaria were lowered by roughly 10 per cent In Czechoslovakia, prices were lowered by about 5 per cent in April, and in the same month price reductions were announced in Albania, Hungary and Poland

In *North and Middle America,* only Guatemala and Mexico reported appreciable price increases from 1955 to 1956 In Canada and the United States, recent twelve-month increases have totalled only about 2 per cent but the increases in mid-summer of 1956 were the greatest for several years and this recent trend has caused some concern

*African* countries reporting price changes have not undergone serious inflation for some years Only Morocco experienced a price increase as great as 8 per cent from mid-1955 to mid-1956, while Tunisia and Uganda reported increases of 7 per cent

In *Oceania,* Australia, New Zealand and Fiji were all affected in recent months by rising prices after several years of price stability

WAGES AND REAL WAGES

With the gradual disappearance of war-time economic dislocations and the tendency of the world economy to stabilize at high levels of production and income, wage adjustments have assumed new significance Through-

workers' levels of living and on employers' profit margins By 1953, however, there was a significant levelling-off of consumer prices and 1954 was a year of economic stability in most of the world's industrial countries Because of the existence of rationing and black markets, when wages in many countries tended to rise more than officially-registered consumer prices during the war and the immediate post-war years, this did not always imply an improvement in levels of living Recent wage increases, however, have resulted in real improvements in levels of living, and—with stabilizing market prices and the disappearance of sellers' markets—it has become increasingly difficult for employers to shift the cost of higher wages to the consumers of their products

In view of the rough nature of the data available for some countries and the fact that it has been necessary to depend on different measures and concepts of money wages—rates of pay, average earnings, wages per hour, day, week and month—country-by-country comparisons of real wage changes during the period covered tend to be misleading Statisticians in some of the countries represented may prefer to use different measures of real wages, and the best available data in some cases are subject to a substantial margin of error The reservations that apply to individual countries are not, however, so important with respect to the countries as a group, and certain general characteristics of real wage movement in twenty countries may be described with greater confidence (see table 8)

It should be noted, however, that the twenty countries for which information is available for the period 1939 to 1954 are almost exclusively the more developed countries, and include only seven countries outside Europe

It is significant that over the entire period from 1939 to 1954, real wages in four fifths of the countries surveyed increased by 10 per cent or more One fourth of the countries experienced increases in real wages of between 20 and 30 per cent, while almost one third had increases amounting to 40 per cent or more The countries

[15] Information on measures taken in the USSR to improve service to consumers, submitted by the Government of the USSR to the United Nations on 10 May 1956

[16] *Rocznik Statystyczny 1955* (Warsaw) p 175

reporting gains greater than 40 per cent were Canada, Finland, Israel, Sweden, the United Kingdom and the United States The distribution of real wage changes between the continents of the world shows no clear patterns, both great and small gains were registered in America and Europe, and there is insufficient information to support generalizations for the other continents

The median increase in real wages from 1939 to 1954 was approximately 26 per cent—i e , half the countries reported increases of more than this amount while half reported lower figures These figures, however, probably understate the real improvement in the workers' economic position since the pre war period

*Table 8*

PERCENTAGE CHANGE IN REAL WAGES IN TWENTY COUNTRIES[a]
1939-54

| Percentage change | No of countries reporting change | | |
|---|---|---|---|
| | 1939-54 | 1946-54 | 1939-46 |
| Decrease | 2 | 0 | 9 |
| Increase | | | |
| Less than 10 | 2 | 5 | 4 |
| 10 but less than 20 | 3 | 3 | 2 |
| 20 but less than 30 | 5 | 5 | 2 |
| 30 but less than 40 | 2 | 3 | 1 |
| 40 and over | 6 | 4 | 2 |
| Median percentage change | + 26 | + 22 | + 4 |

[a] Argentina, Australia, Austria, Belgium Canada Denmark, the Federal Republic of Germany, Finland France Ireland Israel Italy, the Netherlands, New Zealand Norway, Mexico Sweden, Switzerland the United Kingdom and the United States of America

They make no allowance for the extension and liberalization of social insurance and other social programmes,[17] which in some countries have been more important than the gain in real wages themselves

Of the countries reporting on wage developments in manufacturing from 1954 to 1955, all showed increases (usually expressed in terms of earnings or rates per hour) In every case but one (that of the Republic of Korea, where inflationary movements preclude any sound appraisal of real wage changes), wages rose more than prices, implying an increase in real wages

Money wage levels in the spring of 1956 were higher than in the same period of 1955 in all but one of the countries covered The exception was the Philippines, where average monthly earnings in February and March 1956 were 3 per cent below their level in the same period of 1955 A supplementary series relating to daily wage rates in a limited number of industries in the city of Manila, however, suggests that this decline was attributable more to a decline in hours worked per month than to any drop in wage rates

Sixteen reporting countries showed real wages higher in 1956 than in the comparable period of 1955, the typical increase was of the order of 3 to 4 per cent In France, however, real wage rates in March 1956 were 6 7 per cent above their March 1955 level, in Japan, average monthly earnings in March May 1956 were 6 2 per cent above their level in the same period of 1955, in Puerto Rico, real hourly earnings in February-April 1956 were 8 9 per cent above the corresponding figure for 1955, with weekly earnings 11 1 per cent higher In all three cases, the increase in real wages was associated with increased levels of industrial production and higher levels of business activity than in the same periods of 1955

In addition to the Philippines, where both money and real earnings declined from 1955 levels, real (though not money) wages declined in Australia, Brazil, Finland, Italy and New Zealand The drop from 1955 levels was 1 per cent or less in Australia, Italy and New Zealand, but amounted to 12 4 per cent from March 1955 to March 1956 in Brazil (Federal District), where the wage price inflationary spiral has been a source of continuing concern to the Government

The increases in wage levels were not, of course, accomplished without resistance Differences over wage problems resulted in numerous industrial disputes, many warnings were issued against possible economic consequences

In Eastern Europe, it appears from available data on increases in employment and in the wage bill, as well as on average percentage fulfilment and over fulfilment of norms of work, that a marked rise in money wages took place in the course of the 1954 55 period Reductions of retail prices of consumer goods, although in scope and extent less important in 1955 th[illegible] also contributed to increa[illegible] th[illegible] coun-[illegible] with the price in-[illegible] above However, plans to achieve a more rapid increase in real wages and consumption levels were adversely affected by failure to achieve planned reductions of costs of production

In the USSR, the real wages of wage-earners and salaried employees, taking 1950 as the base year (100) are stated to have increased to 139 in 1955, and incomes in cash and kind of agricultural workers, derived from public and private holdings per single worker, at comparable prices, to have increased from 100 to 150 during the same period[18] In the course of 1956, adoption of new minimum wage laws was reported from Poland, Romania and the USSR By virtue of these laws, salaries and wages of the lowest paid wage-earners and salaried employees were raised The same laws provided for exemption from payment of taxes and a substantial decrease in fiscal charges for the lowest and medium paid wage-earners and salaried employees respectively

It is important to note that such supplements to wages as family allowances, unemployment insurance benefits, medical care, accumulated rights to eventual re[illegible]

[17] Taxes and social contributions payable by the workers have also increased in many countries, but generally less than social

[18] *Narodnoe Khozyaistvo SSSR*, p 37

benefits, and paid holidays—often referred to collectively as "social benefits" or "fringe benefits"—are not covered by the wage data as reported by the statistical offices of the different countries (nor are tax differentials, tax exemptions, etc, for low-income families) Such benefits are relatively important in a number of countries, however, and in many cases have been introduced or expanded since the pre-war period, sometimes as alternatives to wage increases In appraising long-term wage movements in countries such as France and Italy, where social benefits are particularly high in comparison to average earnings, it is essential to take the trend of these wage supplements into account. It is also important to take the corresponding cost of social benefits to employers—usually referred to as "social charges"—into account in discussing wage statistics in relation to the movement of labour cost

The year 1955 was a good year for gains in social benefits which augmented the workers' real income or increased their security A national family allowance system went into effect in the Federal Republic of Germany and increased family benefits were paid in France More liberal unemployment insurance benefits were approved by the Canadian Parliament In the United States, many thousands of workers in the steel and automobile industries won increased protection against unemployment in "guaranteed annual wage" contracts In Burma, a general social security system was established for the first time, in its initial phase it covers some 55,000 industrial and transport workers in the Rangoon area These are only some of the more spectacular aspects of a trend which brought greater security,vacations with pay or other benefits to millions of workers

According to available information, "payments and benefits received by the population of the USSR from the State budget and from the funds of undertakings" have increased as follows [19]

| | *(Thousand millions of roubles)* |
|---|---|
| 1940 | 42 |
| 1950 | 122 |
| 1951 | 125 |
| 1952 | 129 |
| 1953 | 135 |
| 1954 | 147 |
| 1955 | 154 |

It is reported that "These payments and benefits include expenditures by the State on Social insurance grants and payments to wage-earning and salaried employees, social security pensions, grants to mothers with many children and unmarried, widowed, or deserted mothers, scholarships for students, free medical assistance, free or low-cost tickets to sanatoria and rest homes, free training and refresher courses, wage and salaries during annual leave, and other payments and benefits to workers" [20]

Important changes in wage structure or in methods of determining wages also took place during the year In the United States, a sharp decline was noted in wage agreements with "escalator clauses" (by which wages are tied to the cost of living) Automatic cost of living adjustments were dropped as a determining element in wage adjustments in Australia and were under challenge in Israel and elsewhere There was strong pressure for higher differentials for skilled work in a number of countries, including Israel and the United Kingdom

According to a report from Yugoslavia, the average monthly wages of highly skilled workers in 1955 were 14,200 dinars, of skilled workers 9,920 dinars, semi skilled workers 7,990 dinars and unskilled workers 6,750 dinars (The official rate of exchange at this time was 400 dinars to $1 ) The industries providing the widest differentials for skilled work were the graphic industry, coal-mines, ferrous metallurgy and the paper industry In these four branches average wages were as follows [21]

| *Branch* | *Highly skilled* | *Skilled* | *Semi-skilled* | *Unskilled* |
|---|---|---|---|---|
| Graphic industry | 16 590 | 10 970 | 7,720 | 6 330 |
| Coal industry | 16 480 | 12,140 | 9,210 | 7,120 |
| Ferrous metallurgy | 16 560 | 11 600 | 9,210 | 8 150 |
| Paper industry | 16 350 | 11 360 | 8,060 | 7,130 |

The above were reported to be the industries with the highest productivity, whereas industries with the smallest spans in wages were reported to have the lowest productivity

### Industrial disputes

The relations between management and labour occupy a prominent place among the problems of our times Negotiation, collective bargaining and arbitration have not eliminated industrial conflict, despite the emphasis placed in recent years on the common interests of managers and workers and on the advantages of industrial peace, and disagreements between workers and employers still often lead to stoppages of work where such stoppages are permitted

The occurrence of industrial disputes is erratic, they are given to sudden outbursts and may not show any discernible "trend" It is nevertheless clear that after the general post war increase in disputes observed throughout the world in the period 1945 to 1949, and again in 1952, there was a definite dropping off in disputes The year 1954 was the most peaceful post war year, characterized by a substantial drop throughout the world in the number of man-days lost in industrial disputes thus, while in 1949, and again in 1952, nearly a hundred million man-days of work had been lost in disputes in the twenty-eight countries for which data are available and which account for a very large percentage of the world's disputes, in 1954 the corresponding figure was below fifty million In the United States, which contributes every year about half of the known number of man-days lost in the world through disputes, only twenty-three million man days were lost in 1954 in contrast to fifty-one million in 1949 and fifty nine million in 1952

Industrial disputes were somewhat more numerous in 1955 than in the extremely peaceful year of 1954, but

[19] *Ibid.*, p 38

[20] *Ibid.*

[21] *Borba*, 8 April 1956

compared favourably with most other post war years In the twenty-eight countries which regularly publish statistics on man-days lost through industrial disputes, the total of days lost rose from forty nine million in 1954 to sixty million in 1955 The new total was still well below the average of seventy million during the past five years Man-days lost in the twenty eight countries in recent years are as follows

| | Millions |
|---|---|
| 1949 | 96 |
| 1950 | 95 |
| 1951 | 52 |
| 1952 | 94 |
| 1953 | 61 |
| 1954 | 49 |
| 1955 | 60 (estimate) |

In the United States, the total number of days lost through disputes increased from twenty three million in 1954 to twenty eight million in 1955, representing still only about 0 2 per cent of the estimated total time worked or much less than the time given over to holidays or taken by sickness

In the United Kingdom, the number of man days lost due to industrial disputes rose sharply during 1955 Whereas losses in 1954 amounted to about 2 5 million days about 3 8 million were lost in 1955—more than in any year since 1932 The branches of industry most heavily affected were coal mining and transport services France too, witnessed industrial disputes on a larger scale than in 1954, notably in the engineering and ship building industries which suffered from a number of strikes lasting through several weeks Losses in Italy in 1955 were about the same as those reported for 1954 It is noteworthy that out of a total loss of about 5 6 million man days more than two million were lost through work stoppages in agriculture

Among the other significant disputes during 1955 were a one day strike of 50 000 Japanese steel workers in September and the walk out of 130 000 textile workers in October, also in Japan In Chile where heavy inflation shook the economy, a number of disputes arose over adjustments of wages to the increased cost of living these included a one day general strike in July and a three-week strike of 55 000 employees in public services in September

## Industrial injuries

Recent injury rates in reporting countries (applying chiefly to mines, manufacturing and railways) have been very generally lower than before the Second World War In eight countries out of ten for which data are available,[22] fatal injuries in manufacturing per thousand employed, have been appreciably fewer than in the late 1930 s, and the same general picture prevails for mines and railroads Non fatal accidents in mines on the other hand, have increased in a number of countries and fail to disclose any definite trend as compared with pre war years

[22] Namely Belgium Canada, Ceylon, France the Federal Republic of Germany Japan Puerto Rico the Union of South Africa, the United Kingdom and the United States of America

The year 1954 witnessed a decline in industrial injuries in several reporting countries and appears generally to have been one of the best years on record in this respect In Canada and the United States where the level of industrial activity was somewhat reduced there were fewer fatal injuries than in 1953, preliminary estimates for the United States suggest a drop from 15 000 industrial fatalities in 1953 to about 14 000 in 1954 In the Federal Republic of Germany, fatal injuries in coal mines continued a steady downward trend Fatal injuries in coal mining in France declined slightly from 1953 to 1954 Deaths in coal mining in India in 1954 were at about the same level as during the preceding three or four years Deaths in mining declined in the United Kingdom in 1954 but the total number of industrial injuries increased

The trend from 1954 to 1955 is still unclear, but the fragmentary data available suggest little change from the relatively low levels established in 1954

## Agricultural labour

In the section on employment reference has already [illegible]

[illegible] agricultural manpower might have unfavourable effects on agricultural production Thus considerable stress is being laid on mechanization and other technological improvements including the use of the airplane for [illegible]

wage increases in some cases at a greater rate than [illegible] Sweden for example and real [illegible] The [illegible] other [illegible] rs of [illegible] United Kingdom and in more and more countries agricultural workers are benefiting from social security programmes A major cause of dissatisfaction among agricultural [illegible]

[illegible] Republic of Germany, the State is taking an active part in assisting workers and employers to build houses through subsidies low-cost credit etc

However, in subsistence farming in the more industrialized countries (as in the less developed areas) there is still a surplus of labour and Governments are concerned with the fuller utilization of these workers who are family members for the most part In Southern Europe, for example, where the pressure of population on land is heavy, Governments are actively pro-

development projects which would create alternative employment opportunities in rural areas In the United [illegible] way to train surplus [illegible] orer, largely subsis- [illegible] rm employment In Western Europe, the consolidation of holdings is being stressed to enable the creation of more economically sized units on which modern methods of cultivation may be effectively practised Under these various conditions regional development planning, including the decentralization of industry, is being favoured with a view to making fuller use of local labour resources on the one hand, and on the other to avoid further congestion of urban centres

The "rural exodus" is also causing concern in some of the less developed countries, where urban employment and urban life offer strong attractions in contrast to the frequently pitiful conditions prevailing in rural areas But in these countries urban areas do not in fact yet offer wide opportunities of employment, nor are the rural workers trained for such jobs as may be available The result is a continual disorderly shifting back and forth between the countryside and the town of an unstable and unskilled labour force, with undesirable effects in city and village alike

In the less developed countries, the bulk of the labour force in agriculture consists of small owner-operators and tenants, share croppers and similar categories of workers The last ten years have shown a remarkable development of measures to improve the lot of these workers [23] Evidence is not available, however, to analyse the effects

[23] [illegible] 1955 IV 18)

In areas of serious pressure of population on available land, tenancy reform and even land reforms cannot do much to solve the problem of the small size of the holding and the consequent underemployment of a significant proportion of the agricultural population (see above) Thus, in many countries, emphasis is being given to the development and improvement of small-scale industries in rural areas which would provide supplementary employment opportunities to cultivators and their families This, for example, is being given particular stress under the Indian Second Five Year Plan

Vocational guidance and vocational training programmes are playing an important role in rural areas, both as a means of improving agricultural practices, by the establishment of extension services, for example, and in connexion with training rural workers for non-agricultural occupations, permitting these workers to be better adapted to urban employment and assisting growing industries in their search for skilled manpower No less important is training in crafts for supplementary employment

It would appear that there is now a more general recognition in countries at all stages of development of the need to think in terms of a balanced policy of employment, aiming ultimately at keeping on the land a skilled agricultural labour force consonant with the requirements of food and other agricultural production, while making possible an orderly movement of workers towards non-agricultural employment in the numbers and of the skills required for expanding economic development In a later section of this report greater attention is paid to the problems of urbanization Many of these may be characterized as a transposition of problems from rural to urban areas, and Governments are realizing that by improving conditions in the rural sector they may at the same time mitigate the social evils which rapid urbanization has brought about

# PART II

## Chapter VII

# SOCIAL PROBLEMS OF URBANIZATION IN ECONOMICALLY UNDER-DEVELOPED AREAS

### Introduction

In the economically under-developed areas of the world, extremely rapid urban growth during recent years has brought into special prominence the social problems of urbanization. Information on this subject is very inadequate, most studies of urbanization have been concerned with the industrially advanced countries Yet it is obvious that in Africa, Asia and Latin America a vast transformation is now taking place and posing the most difficult questions of social policy The present discussion will focus on urbanization in these regions [1] This concentration of interest should not be understood to imply, however, that the questions of urbanization have by any means now been solved in the more advanced countries Congestion from the chaotic growth of cities can be found in every region and slums can be seen in countries of all types

#### *Definition of urbanization*

"Urbanization" is used in the present context to refer to the process whereby an increasing proportion of a country's population lives in urban localities, the "degree of urbanization"—the extent to which a country is urbanized—will be understood to mean the percentage of its population living in urban localities as of a given date. A country like India may have a number of large cities and yet be little urbanized because of the comparative magnitude of its rural population

The exact definition of what in turn constitutes an "urban" locality, as distinguished from a "rural" locality, is necessarily arbitrary, since there is no obvious dividing line between large villages and small towns or cities, in terms either of size or of other criteria The study of urbanization is complicated by the fact that census practices vary in regard to the characteristics a locality must have in order to be classified as urban For example, at one extreme, in Denmark, localities of 250 inhabitants are considered urban, while in Korea an urban locality must have at least 40,000 inhabitants. Many countries classify not by the population size of a civil division, but by other criteria, singly or in combination, such as population density, predominant forms of economic activity, legal or administrative status, the

thermore, the criteria used by economists, sociologists,

according to one set of criteria and rural according to another

In most countries, the dividing line is in effect somewhere between 1,000 and 5,000 inhabitants, but it may

tor of the extent of urbanization, without any implication that this is the true rural-urban dividing line for all countries The choice of 20,000 rather than a smaller figure is dictated by practical considerations, including the question of availability of data The use of a level

characteristics, as urban, and will particularly understate the degree of urbanization in this sense in developed countries, where towns much smaller than 20,000 may be quite industrial and urban in character

[1] As pointed out in the Preface to this *Report*, special chapters on ... of the Sahara and Latin America ... ast, for lack of informa- ... ions of the Joint UN/ ECAFE Region have

closer to the countryside than others in services, facilities, modes of life, etc., cities in under developed countries tend especially to have large sectors that are semi-rural in character. In general, it can be assumed that statistical comparisons based on an arbitrary dividing line under-state the differences in extent of urbanization —conceived economically and socially—as between the more developed and the less-developed countries.

Urbanization ordinarily implies migration to cities from the rural areas, or, in some cases, from abroad. The proportion of city dwellers in a country can, of course, also grow if the rates of natural increase from an excess of births over deaths are higher in the cities than in the rural districts, but usually they are lower. The process of natural increase in the country as a whole can, however, lead to a significant expansion in the degree of urbanization on purely statistical grounds, without any migration and without any rural-urban difference in rate of natural increase.[2]

In the sense defined here, urbanization is not synonymous with urban growth: the cities of a country may expand for reasons of natural increase, yet, because of equal or more rapid expansion of the rural population, there may be no increase in the percentage of the total population living in cities, or even a decrease.

The social problems of urbanization considered in the following pages are those that attend the process of shift in population from rural to urban living. Important social problems of city life exist quite independently of the urbanization process—a city that contains only a long-established, inborn population is affected by many questions of a social nature that arise from the conditions of life of the several classes or groups of its population and the inter-relations of these groups (e.g., labour and management). In keeping with the emphasis upon "the problems of peoples undergoing rapid transition especially through urbanization",[3] the present study will not be concerned with questions of city life as such. In practice, however, it is often difficult to make sharp separations. For example, migrants usually form an addition to the existing low-income segment of the city population, and information on the conditions of life and social problems of the migrant families may not be separately available, particularly in the few studies of low-income populations in economically less developed areas. Furthermore, problems created by rapid urbanization may be shared by more than the migrants, the inflow of the migrants may have an impact on housing, employment, wage levels, health and other conditions of the established city population.

*Urbanization and the general social process*

While urbanization implies profound social and cultural changes for those involved in it, particularly in the less developed regions where the gulf is vast between life in a large modern city and life in a traditional village (sometimes estimated to be equivalent to hundreds, or even thousands, of years of historical development), the process of urbanization is today but part of a larger process of economic and social change which is affecting the countryside as well. Most rural communities in the world have now experienced some penetration of modern (urban type) influences and are themselves in process of change—a change which is in many respects similar to but much slower than the change experienced by people who move in their lifetime from rural to urban living. These influences favouring transition in the rural communities—not the least of which is the return of former migrants to their native villages—tend to mitigate somewhat the shock of rural-urban transition.

The social problems associated with rapid urbanization are complex in origin and their causes are difficult to identify. To a large extent they overlap with what have been called the "evils of industrialization", commonly associated with the industrial revolution in the West. Yet it would be quite mistaken to assume that the social problems of urbanization in the economically less developed countries of today are necessarily consequences of industrialization. In the first place, the urban areas of these countries still contain relatively little industry, and, in general, only a small minority of those who settle in the cities work in industries, particularly in industries of the factory type. Moreover, those who find work in large modern industries are usually much better off than their fellow migrants who are often under-employed or irregularly employed as porters, hawkers and petty traders, construction workers, servants, etc. In fact, an expansion of industry, properly adapted to the resources and requirements of the countries concerned, has been widely proposed as the answer to many of the problems of urbanization in the under-developed regions.

Nor can it be assumed that all of the social problems *of urban life necessarily* originate in the urban milieu itself. In many cases, the so-called "consequences" of *industrialization* or urbanization represent little more *than the* transfer, through migration, of rural poverty to the cities where it becomes more concentrated and con*spicuous*. The growth of cities is not the reason for this poverty, although it may be in part the result of it. The overflow of rural distress into urban districts is an *outstanding* characteristic of economically under-developed countries today.

Other "evils of the city" represent a failure of adaptation—of the individual in his habits of work, hygiene, consumption, etc., and of the urban community as a whole in its institutions and services. Lack of education and of skills and a wide cultural gap between the city and the countryside make adjustment difficult for the rural migrant and his family. Rural customs and practices that were useful or only mildly harmful in their original context are continued into city life, where they are inappropriate and can lead to various maladies of urban *society*. New *institutions* and services required by the nature of the urban environment—for example, in con-

[2] If, for example, the population of a country doubles in a genera- tion and if the increase is shared by all [illegible]

[3] Resolution 585 H (XX) of the Economic and Social Council

nection with various problems of social security—are not developed or are developed but slowly, to take the place of the old ones that disintegrate in the modern city The ensuing social ills, here again, are not necessary and permanent aspects of urban life as such but arise in the process of urbanization out of disparities, disruptions and conflicts, against which action can be taken

Whether the city, by its very nature, implies also certain social ills which cannot be avoided by any possible public measures or private adjustments because they are inherent in the nature of the urban environment is a question of opinion, beyond the realm of present scientific knowledge There is also no factual and objective answer to the question—frequently debated in broad philosophic terms—whether contemporary urbanization is a good thing or a bad thing, when all its advantages and disadvantages, economic, social and cultural, have been taken into account The negative aspects—many of which will necessarily be stressed in the following pages as conditions calling for social action—must be viewed with the positive aspects [4] Much will depend on the manner in which urbanization takes place and the extent to which the present chaos of rapid city growth can be replaced by more rational and orderly procedures of regional as well as urban development also upon the extent to which urbanization is in fact so inevitable in modern civilization as to make debate upon its ultimate merits rather pointless In any case, it must be kept in mind that the choice of an urban mode of life, for those who make it, is not an absolute choice but a relative one The alternative is rural life which, for great masses of people, is apt to be a life of monotonous and narrow poverty, lacking the opportunities, or at least the hope, for personal betterment that the city offers

It is evident that rural residents who are potential migrants often glamo... realities of urban life, ... urbanites often look ... proximity to nature and its presumed harmony of human relations, and tend in turn to glamorize the rural community, ignoring its harsher aspects The mass movement of rural inhabitants to cities and the much smaller movement in the opposite direction would suggest a popular conclusion concerning the relative advantages of urban and rural life—as these present themselves—which is quite different from that of many philosophers and commentators upon modern society, who view the question from another perspective It should be noted, however, that many migrants prefer to return to their villages when they have made a certain sum of money or when they retire, and that in some of the more industrially advanced countries ... ment of middl... suburban com... children—in a... features of urban and rural existence This type of suburban growth should be distinguished from the growth in under-developed countries of peripheral slums which combine some of the worst features of city and country and which retard urban development in many such countries

Particular factors of change associated with urbanization very often have both desirable and undesirable social aspects For example, with urbanization there is usually greater freedom for women, but experience in a number of countries shows that this freedom may be exercised, *inter alia*, in the practice of prostitution or in illicit, unstable sexual unions The greater freedom of youth from patriarchal authority of the elders may also be a freedom that finds its expression in juvenile delinquency For all individuals, escape from the constraints of the traditional society is also an escape from its securities

It is in general, however ... lish ... inter-acting forces ... operate in a simple mechanical fashion throughout the world Urbanization may entail certain consequences in one country, but not in another, depending upon the total situation It may, for example, entail family disruption in many culture areas but not in all, or for some classes of the population, but not all Furthermore, the same change (in family life, status of women etc) that is caused by urbanization can also result from forces penetrating the countryside—such as the spread of new ideas and values or of modern systems of law and administration—and can itself become a cause rather than a consequence of urbanization The influence of the city, for good or ill, must therefore be viewed in relation to the total process of change taking place within a country

## DEMOGRAPHIC ASPECTS OF URBANIZATION

*The rapid growth of cities, especially of large cities, is an outstanding feature of the modern age Between 1800 and 1950, the population of the world living in cities with 20 000 or more inhabitants increased from about 21 7 million to 502 2 million,* [5] *expanding twenty three times in 150 years, while the total world* ... *tion expanded about 2 6* ...

... city life has been associated with the very beginnings of civilization, the ancient cities were few in number and, with rare exceptions like Rome and Constantinople, small in comparison with the mammoth agglomerations found today Athens at its peak in the

[4] The UN/UNESCO Seminar on Urbanization in the ECAFE Region called attention to the historical role of cities in promoting economic and cultural progress (see annex)

[5] These and other figures in the following pages on world urban growth are based largely on estimates prepared ... and Hilda Hertz, to be ...

*Table 1*

TOTAL WORLD POPULATION AND WORLD URBAN POPULATION 1800-1950

| Year | Total world population | Population living in localities of 20 000 inhabitants or more | | Population living in localities of 20 000 to 100 000 inhabitants | | Population living in localities of 100 000 inhabitants or more | |
|---|---|---|---|---|---|---|---|
| | Millions | Millions | Per cent of world population | Millions | Per cent of world population | Millions | Per cent of world population |
| 1800 | 906 | 21 7 | 2 4 | 6 1 | 0 7 | 15 6 | 1 7 |
| 1850 | 1,171 | 50 4 | 4 3 | 22 9 | 2 0 | 27 5 | 2 3 |
| 1900 | 1,608 | 147 9 | 9 2 | 59 3 | 3 7 | 88 6 | 5 5 |
| 1950 | 2,400 | 502.2 | 20 9 | 188 5 | 7 8 | 313 7 | 13 1 |

*Source* Kingsley Davis and Hilda Hertz, *Patterns of World Urbanization* (to be published by Macmillan and Company)

fifth century B C probably had a population no greater than 180,000 [6] The rate of urban growth in ancient times never approximated to that of the present day In fact, the rate of world urban growth has been ever-accelerating since 1800, being greater in 1900-1950 than 1850-1900 (table 2), and there is reason to believe that it will continue to accelerate for some time to come

A major factor in the present and the anticipated future acceleration is the sudden spurt of urban growth in economically under-developed countries Between 1900 and 1950, the population living in cities of 100,000 or more in Asia mounted from an estimated 19 4 million to 105 6 million (a gain of 444 per cent) and in Africa from 1 4 million to 10 2 million (a gain of 629 per cent)

[6] Kingsley Davis, "The Origin and Growth of Urbanization in the World", *The American Journal of Sociology*, vol LX 5 March 1955 pp 429-437

*Table 2*

PER CENT OF INCREASE IN TOTAL WORLD POPULATION AND IN WORLD URBAN POPULATION 1800-1850, 1850-1900, 1900-1950

| Years | Total world population Per cent increase | World population living in agglomerations of 20 000 inhabitants or more Per cent increase | World population living in agglomerations of 100 000 inhabitants or more Per cent increase |
|---|---|---|---|
| 1800-1850 | 29 2 | 132 3 | 76 3 |
| 1850-1900 | 37 3 | 193 5 | 222 2 |
| 1900-1950 | 49 3 | 239 6 | 254 1 |

*Table 3*

POPULATION IN LARGE CITIES (100 000 AND OVER) BY MAJOR CONTINENTAL REGIONS

| Area | 1800 | | 1850 | | 1900 | | 1950 | |
|---|---|---|---|---|---|---|---|---|
| | In millions | As per cent of total population | In millions | As per cent of total population | In millions | As per cent of total population | In millions | As per cent of total population |
| World | 15 6 | 1 7 | 27 5 | 2 3 | 88 6 | 5 5 | 313 7 | 13 1 |
| Asia | 9 8 | 1 6 | 12 2 | 1 7 | 19 4 | 2 1 | 105 6 | 7 5 |
| Europe [a] | 5 4 | 2 9 | 13 2 | 4 9 | 48 0 | 11 9 | 118 2 | 19 9 |
| Africa | 0 30 | 0 3 | 25 | 2 | 1 4 | 1 1 | 10 2 | 5 2 |
| America | 0 13 | 0 4 | 1 8 | 3 0 | 18 6 | 12.8 | 74 6 | 22 6 |
| Oceania | — | — | — | — | 1 3 | 21 7 | 5 1 | 39 2 |

[a] Including USSR.

*Source* Davis and Hertz, op cit.

It will be seen from table 3 that the large city population of Asia and Africa has increased much more rapidly during the twentieth century than it did during the nineteenth century, while in Europe and America, urban growth reached its peak in the latter part of the nineteenth century and slowed down thereafter These shifting rates of growth have meant that Asia, which contained nearly two-thirds of the world's population in large cities in 1800, had less than a fourth by 1900, but then the trend started to reverse, and by 1950 Asia had one third of the world's large-city population Table 4 shows the estimated distribution, by region, of the world's population living in localities of 20,000 or more and 100,000 or more, as of 1950

*Table 4*

DISTRIBUTION OF THE WORLD URBAN POPULATION BY LARGE GEOGRAPHIC REGIONS 1950

| | Distribution of the total world population | Distribution of the world urban population: Population living in localities of 20 000 inhabitants and more | Distribution of the world urban population: Population living in localities of 100 000 inhabitants and more |
|---|---|---|---|
| WORLD | 100 per cent | 100 per cent | 100 per cent |
| Asia | 53.2 | 33.8 | 33.7 |
| Europe [a] | 16.4 | 27.5 | 26.5 |
| North America [b] | 6.8 | 13.9 | 15.2 |
| USSR | 8.1 | 12.0 | 11.2 |
| South America | 4.6 | 5.8 | 6.5 |
| Africa | 8.2 | 3.7 | 3.2 |
| Middle America [c] | 2.1 | 2.1 | 2.0 |
| Oceania | 0.5 | 1.2 | 1.6 |

*Source* Davis and Hertz, op cit.

[a] Except the USSR.

[b] Including the United States of America and Canada

[c] Including the countries of Central America Mexico and the Caribbean

In spite of rapid urban growth, the increase in degree of urbanization in Asia and Africa still d d not ... l the increase ... E ... this paradox ... urban growt ... ... the population of Asia living in cities of 100,000 or more increased prodigiously from 19.4 million in 1900 to 105.6 million in 1950, the percentage of the total population living in such cities increased only from 2.1 per cent to 7.5 per cent, in other words, there was only a 5.4 per cent shift ... ule in Europe ... iod Because ... a small proportion of the total population in Asia (and other less developed regions), a small change in the degree of urbanization will produce a large amount of urban growth, or conversely stated, a large amount of urban growth is required to make a significant impact upon the population structure [7]

[7] This follows from the def ... as ... It ... in ... ou ... po ... mo ... t of one out of ten to the city will increase the urban population by only 20 per cent Yet the same proportion of the population has undergone urbanization in both cases While the ... urban populat ... stan ... slow ... pict ... shoc ... shift ... —a ... years ... years ... increase in the urban population as such

In the majority of the less developed countries, the rural population has continued to grow along with the urban population, although at a slower pace, but in many of the developed countries the abs ... rural populat ... in recent deca ... has been a ... urban population

There are, however, important differences in the levels and trends of urbanization among the industrially more advanced countries and among the less developed countries These differences are concealed by the over-all estimates given in tables 3 and 4 A few figures will illustrate the variations in levels as of a recent date

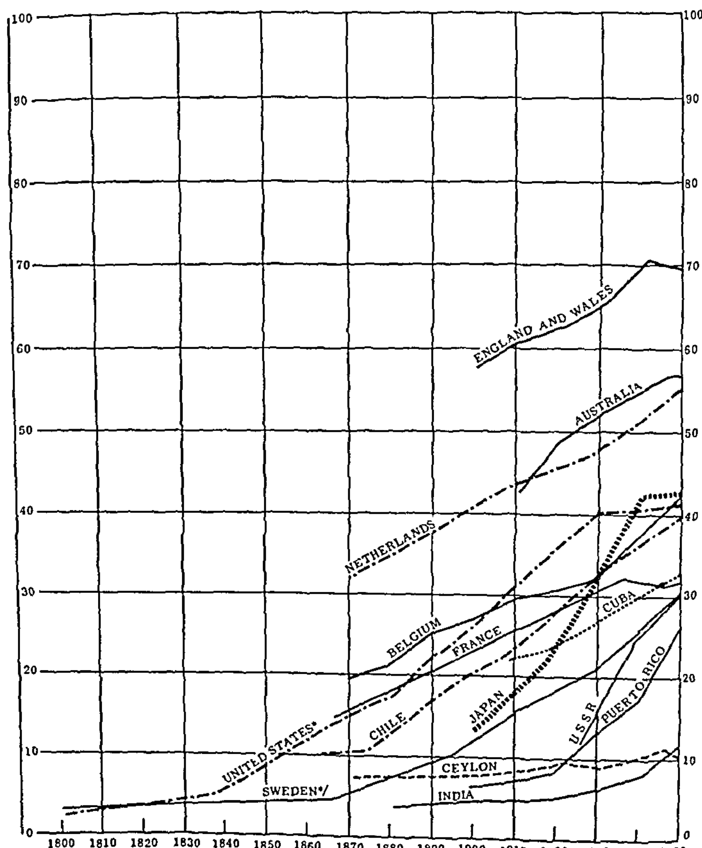
| Country | Date | Per cent of the population in localities of 20 000 or more |
|---|---|---|
| *Europe Northern America and Oceania* | | |
| England and Wales | 1951 | 69 |
| Australia | 1951 | 57 |
| Netherlands | 1950 | 56 |
| Germany (West) | 1950 | 45 |
| United States | 1950 | 43 |
| Belgium | 1950 | 42 |
| Austria | 1951 | 40 |
| Denmark | 1950 | 40 |
| Canada | 1951 | 35 |
| Sweden | 1950 | 35 |
| France | 1954 | 33 |
| USSR | 1955 | 32 |
| Switzerland | 1950 | 31 |
| Finland | 1950 | 24 |
| Yugoslavia | 1948 | 13 |
| *Africa Asia and Latin America* | | |
| Argentina | 1947 | 48 |
| Japan | 1950 | 42 |
| Chile | 1950 | 40 |
| Cuba | 1950 | 33 |
| Venezuela | 1950 | 31 |
| Egypt | 1947 | 29 |
| Mexico | 1950 | 24 |
| Iran | 1950 | 21 |
| Brazil | 1950 | 20 |
| Ecuador | 1950 | 18 |
| Turkey | 1950 | 15 |
| India | 1951 | 12 |
| Ceylon | 1946 | 11 |
| Guatemala | 1950 | 11 |
| Pakistan | 1951 | 8 |
| Haiti | 1950 | 5 |

These figures not only show the wide variations but also indicate that several of the economically less-developed countries, particularly in La ... higher levels of ... cular criterion ...

Graph I inc ... es, for a selected number of co ... trends in urbanization—in terms of the perc ... the population living in localities of 20,000 or m ... over varying historical periods for which data ...

*Graph I*

PER CENT OF TOTAL POPULATION LIVING IN LOCALITIES OF 20,000 OR MORE (SELECTED COUNTRIES) 1800-1950




* Basic unit is locality of 25 000 or more.

able[8] Some of the more urbanized and industrialized countries experienced a marked slowing-down of their urbanization rate during the period between 1930 and 1950, as measured by this particular index. Included here are France, the United States and (between 1940 and 1950) Japan; England and Wales actually experienced a slight drop between 1941 and 1951. Such a slowing-down or regression may be due to several possible factors: the reaching or approaching of a natural limit of urbanization, depending upon the economy of the country, the effects of the depression of the 1930's and of the Second World War, a shift from city growth to suburban growth—with the improvement of transportation and the overcrowding of cities, suburban localities are growing much more rapidly than cities proper in a number of countries (the United States is an outstanding example) The relative weight of these different factors is not known

Other countries have shown a remarkable increase in degree of urbanization since 1930 This includes Puerto Rico and the USSR. In the latter country, between 1926 and 1955, while the total population increased only 34 per cent, the population in cities of 100,000 or more increased more than four times[9]

India appears to be entering an initial phase of acceleration[10] While the percentage of population shifting to urban localities (i e. the rate of [illegible] high, it is high enou[illegible] nantly rural structu[illegible] fast rate of urban growth. The population in India living in cities of 100,000 or more has more than tripled since 1920 (the same is true of the Federation of Malaya) Ceylon, on the other hand, is remaining relatively stable at a low level of urbanization

It should be noted that the rates of urban growth differ according to the size of locality involved With regard to the United States, for example, if the year 1880 is taken as 100, the following figures represent the situation in 1950

| | |
|---|---|
| Total population of the United States | 300 |
| Population in localities of 25,000 or more | 732 |
| Population in localities of | |
| 10,000-25,000 | 569 |
| 25,000-50,000 | 657 |
| 50,000-100,000 | 957 |
| 100,000-1,000,000 | 540 |
| 1,000,000 or more | 1,443 |

In general, the larger cities in the United States, as a category, have been growing more rapidly than the smaller ones, although the category of cities of the size of 100,000 to one million is an exception A similar tendency for the category of large cities to grow more rapidly than smaller ones during the last half-century or so appears in other countries, including France, Japan, India and the USSR, although again with various excep[illegible]

[illegible] tants or more does not appear, however, to be closely related to the general level of urbanization While the data must be treated with caution, table 5 does indicate that a heavy massing of population in the larger cities can be found in countries that are as yet little urbanized, as well as in more highly urbanized countries

[illegible] countries (United Kingdom, Netherlands, Belgium) and lightly populated countries (Argentina, Australia, Canada), low levels of urbanization will similarly be found in both types—in densely populated Ceylon and [illegible] Afghanistan [illegible] of population [illegible] the speed of recorded urbanization in less developed areas, other things being equal In a sparsely populated country [illegible] type of country, the burgeoning farm population must remain in existing rural localities or move to cities As noted above, even if there is no cityward migration, natural increase of population will raise the urbanization index for statistical reasons, unless there is drainage of population through the establishment of small new rural communities

In view of the low levels of urbanization generally prevailing in the less developed countries and the fact that many of these countries are only in the initial phases of urbanization, it can be assumed that urban growth will proceed at a tremendous pace for some years to come in these parts of the world The social problems connected with rapid urbanization will become increasingly prominent by reason alone of the magnitude of the populations involved, already the total population living in cities in the less developed regions of Africa, Asia and Latin America is about equal to the total urban pop[illegible]

[8] Because of variations in statistical practices, the data from the different countries, and even from the same country at different times, are only roughly compa[illegible] Sweden [illegible] method [illegible] percenta[illegible] than 20, [illegible] lower fo[illegible] criterion were used

[9] Pol[illegible]

[10] [illegible] after the Second World War [illegible] civil disturbance in the countryside, sudden new opportunities for urban employment resulting from the presence of foreign troops or the increased demands from abroad for export goods, political transformations) There is not enough information to tell whether this spurt of urban growth has been followed by a serious slackening during the 1950's.

*Table 5*

DISTRIBUTION OF URBAN POPULATION ACCORDING TO SIZE OF LOCALITY

| Country | Year | Percentage of to al population living in agglomerations of 20 000 inhabitants or more | 20 000 inhabi tants or more | 100 000 or more | 50 000-99 999 | 20 000-49 999 |
|---|---|---|---|---|---|---|
| England and Wales | 1951 | 69 3 | 100 | 73 3 | 10 7 | 16 0 |
| New Zealand | 1951 | 54 2 | 100 | 60 6 | 16 2 | 23 2 |
| Argentina | 1947 | 48 3 | 100 | 76 9 | 10 2 | 12 9 |
| Japan | 1950 | 42 4 | 100 | 60 0 | 18 0 | 22 0 |
| United States | 1950 | 41 2 | 100 | 71 4 | 14 4 | 14 2 |
| France | 1954 | 33 3 | 100 | 50 5 | 18 9 | 30 6 |
| USSR | 1955 | 32 2 | 100 | 65 3 | 13 7 | 21 0 |
| Venezuela | 1950 | 31 0 | 100 | 53 6 | 16 9 | 29 5 |
| Egypt | 1947 | 29 1 | 100 | 66.2 | 11 7 | 22 1 |
| Brazil | 1950 | 20 2 | 100 | 65 5 | 15 4 | 19 1 |
| Tunisia | 1946 | 19 9 | 100 | 56 7 | 8 5 | 34 8 |
| Ecuador | 1950 | 17 8 | 100 | 82 3 | — | 17 7 |
| Paraguay | 1950 | 15 2 | 100 | 100 0 | — | — |
| India | 1951 | 12.0 | 100 | 55 0 | 18 0 | 27 0 |
| Guatemala | 1950 | 11 2 | 100 | 91 1 | — | 8 9 |
| Pakistan | 1951 | 7 8 | 100 | 66 0 | 13 0 | 21 0 |

• Agglomerations of 25 000 inhabitants or more

*Source* *Demographic Yearbook 1955* (United Nations publication, Sales No 1955 XIII 6), table 8

tion of the industrialized countries, and incomparably greater than that of Europe in the early nineteenth century There is some indication (cf Graph I) that countries entering their phase of rapid urbanization during the twentieth century, such as Japan, Puerto Rico and the USSR, have been urbanizing more rapidly than did the countries of Western Europe and Northern America at their peak periods In other words, the problems of urbanization in less developed areas may be accentuated not only by the much greater size of the population involved, but also by the more rapid rate of transition

*Urbanization and population structure*

The demographic structure of urban populations differs in important respects from that of rural populations This is owing largely to the fact that those who migrate to the cities are not representative of the rural population as a whole, and partly to the fact that mortality and fertility rates generally differ as between rural and urban localities The available information on this subject, however, is quite inadequate, particularly for the less developed regions, and conclusions drawn upon the basis of this information must be tentative

In most of the economically developed countries of Europe, Northern America and Oceania, there is a preponderance of females in the cities There may also be, as in France and Switzerland, a predominance of females in the rural areas, but the urban predominance is definitely greater (table 6) Furthermore, it appears in a number of cases that the larger the city, the greater the predominance of females In Latin American countries also the predominance of females in the urban areas is quite marked In Africa and Asia, however, the picture is reversed With one or two exceptions (e g Japan, Iran), it is the males who predominate in the cities, they sometimes predominate in the rural areas also, but the urban predominance is more striking Table 6 shows the ratio of males to females for urban and rural areas in forty-five countries, and the excess of males per 100 females in rural areas over urban areas

These differing concentrations of males and females in cities relate to the economic and social structure and values of the regions concerned It is possible that they relate also to the stage of urbanization, those European and American countries that have reached a relatively high stage of urbanization have a predominance of females, while lightly urbanized Africa and Asia have a predominance of males However, both the more urbanized and the less urbanized countries of Europe and America are characterized by female predominance in urban areas—it is quite striking in some of the less urbanized Latin American countries, conversely, even the more highly urbanized countries of the Middle East and the Far East as a rule have relatively more females in the countryside than in the cities The differences therefore appear to be primarily regional

The tendency in Western countries for females to become relatively more numerous as the size of locality increases is due largely to heavier migration of women from villages and towns to centres of commerce and light industry,[11] where there are more employment opportunities for them than in small localities—as well as more independence Relatively more men stay behind to do the farm work In some countries, as in the United States, the sex ratio in large cities is related to the type of employment offered by the major industries located in these cities, [illegible] which are sup[illegible] higher proport[illegible]

[11] See Rubert B Vance, *All These People* (Chapel Hill 1945), chap 5, and Ana Casis and Kingsley Davis, " Urbanization in Latin America ", *Milbank Memorial Fund Quarterly*, vol XXIV, 3 July 1946, pp 34-38

*Table 6*

MALES PER 100 FEMALES IN URBAN AND RURAL AREAS OF SELECTED COUNTRIES AT THE LATEST CENSUS AND URBANIZATION INDEX IN 1950

| Country | Census year | Males per 100 females | | Excess of rural over urban | Percent of popula ion in places of 20 000 and more around 1950 |
|---|---|---|---|---|---|
| | | Urban | Rural | | |
| *Europe Northern America and Oceania* | | | | | |
| Australia | 1951 | 94 | 115 | 21 | 57 |
| Austria | 1951 | 81 | 92 | 11 | 40 |
| Belgium | 1947 | 95 | 101 | 6 | 42 |
| Canada | 1951 | 96 | 114 | 18 | 35 |
| Denmark | 1950 | 92 | 113 | 11 | 40 |
| England and Wales | 1951 | 91 | 102 | 11 | 69 |
| Finland | 1950 | 81 | 97 | 16 | 24 |
| France | 1946 | 86 | 94 | 8 | 32 |
| Germany | | | | | |
| Eastern | 1946 | 74 | 77 | 3 | (31) |
| Western | 1950 | 88 | 90 | 2 | (45) |
| Netherlands | 1947 | 96 | 104 | 8 | 56 |
| New Zealand | 1951 | 93 | 112 | 19 | 54 |
| Spain | 1950 | 90 | 98 | 8 | 28 |
| Sweden | 1950 | 93 | 108 | 15 | 35 |
| Switzerland | 1950 | 85 | 98 | 13 | 31 |
| Un ted States | 1950 | 94 | 106 | 12 | 43 |
| Yugoslavia | 1948 | 93 | 93 | 0 | 13 |
| *Lat n America* | | | | | |
| Argentina | 1947 | 97 | 120 | 23 | 48 |
| Brazil | 1950 | 91 | 104 | 13 | 20 |
| Chile | 1952 | 85 | 110 | 25 | 40 |
| Costa Rica | 1950 | 87 | 107 | 20 | 11 |
| Dominican Republic | 1950 | 85 | 106 | 21 | 11 |
| Ecuador | 1950 | 91 | 103 | 12 | 18 |
| El Salvador | 1950 | 87 | 105 | 18 | 13 |
| Guatemala | 1950 | 93 | 105 | 12 | 11 |
| Mexico | 1950 | 90 | 103 | 13 | 24 |
| Nicaragua | 1950 | 79 | 108 | 36 | 15 |
| Paraguay | 1950 | 89 | 99 | 10 | 15 |
| Puerto Rico | 1950 | 93 | 104 | 11 | 27 |
| Trinidad and Tobago | 1946 | 90 | 104 | 14 | 34 |
| Venezuela | 1950 | 99 | 107 | 8 | 31 |
| *Asia* | | | | | |
| Ceylon | 1946 | 128 | 104 | —24 | 11 |
| India | 1951 | 116 | 104 | —12 | 12 |
| Iran | 1950 | 96 | 99 | 3 | 21 |
| Iraq | 1947 | 101 | 82 | —19 | 22 |
| Japan | 1950 | 97 | 96 | —1 | 42 |
| Malaya Fed of and Singapore | 1947 | 118 | 110 | —8 | 26 |
| North Borneo | 1951 | 128 | 104 | —24 | 0 |
| Pakistan | 1951 | 133 | 108 | —25 | 8 |
| Sarawak | 1947 | 115 | 105 | —10 | 7 |
| Thailand | 1947 | 107 | 99 | —8 | 8 |
| Turkey | 1950 | 108 | 99 | —9 | 15 |
| *Africa* | | | | | |
| Egypt | 1947 | 102 | 97 | —5 | 29 |
| Union of S Africa | 1951 | 119 | 93 | —26 | 29 |

*Table 7*

FERTILITY AND DEPENDENCY IN MAJOR CITIES AND IN THE COUNTRY AT LARGE

| *Country and year* | *Fertility indicator number of children under 5 per 100 women aged 15-49* | *Dependency indicator number of male children aged 0-14 and aged males (60+) per 100 of potential labour force (males aged 15 59)* |
|---|---|---|
| *Africa and Asia* | | |
| Ceylon (1946) | 54 3 | 70 |
| Colombo | 46 7 | 32 |
| Egypt (1947) | 54 6 | 92 |
| Cairo | 54 8 | 67 |
| India (1951) | 62 1 [a] | 68 |
| Bombay | 51 6 [a] | 32 [b] |
| Israel (1948) | 43 4 | 51 |
| Tel Aviv | 39 0 | 51 |
| Japan (1950) | 52 7 | 77 |
| Tokyo | 45 4 | 58 |
| Korea (1946) | 76 5 | |
| South Korea (1949) | | 88 |
| Seoul (1947) | 50 2 | 61 |
| Malaya, Fed of (1947) | 56 5 | 78 |
| Georgetown | 55 7 | 59 |
| Tunisia (1946) | 56 8 | 92 |
| Tunis | 41 9 | 64 |
| *Europe, Northern America and Oceania* | | |
| Australia (1951) | 45 1 | 63 |
| Sydney | 36 6 | 59 |
| Belgium (1947) | 29 3 | 55 |
| Antwerp | 24 8 | 50 |
| Canada (1951) | 49 8 | |
| Toronto | 27 7 | |
| Denmark (1950) | 39 3 | 69 |
| Copenhagen | 28 9 | 56 |
| Finland (1950) | 47 6 | 68 |
| Turku | 32 6 | 53 |
| France (1946) | 27 8 | 59 |
| Paris | 15 8 | 36 |
| Spain (1940) | 32 2 | 69 |
| Madrid | 22 0 | 49 |
| Sweden (1950) | 34 8 | 53 |
| Stockholm | 27 3 | 43 (1952) |
| United Kingdom (1947) (England and Wales) | 32 1 | 50 |
| London | 29 3 | 45 [c] |
| United States (1950) | 41 7 | 65 |
| New York | 29 7 | 52 |
| Yugoslavia (1948) | 39 1 | 72 |
| Belgrade | 21 7 | 33 |
| *Latin America* | | |
| Argentina (1947) | 42 3 | 59 |
| Buenos Aires | 22 0 | 38 |
| Jamaica (1943) | 47 5 | 78 |
| Kingston | 24 0 | 61 |
| Mexico (1940) | 58 0 | 92 |
| Mexico City | 36 9 | 68 |
| Peru (1940) | 65 5 | 97 |
| Lima | 40 3 | 56 |
| Puerto Rico (1950) | 72 5 | |
| San Juan | 51 5 | |
| Venezuela (1941) | 59 3 | 91 |
| Caracas | 49 4 | 88 |

[a] Children 0-4 per 100 women aged 15-44

[b] Greater Bombay

[c] Greater London

whose economic base is commerce and light industry In such cases and in the less developed Western countries where the economic function of cities is not highly specialized, as is largely true in Latin America,[12] the ratio of males to females does not vary consistently with size of locality, although the general pattern is one of an inverse relationship between the two factors

The pattern found in most of Asia and Africa, i e, the tendency for the population to become more masculine in urban areas, also reflects the sex composition of migrants from rural areas and villages to towns and cities (although in some cases relatively high mortality of females in urban areas may also be a factor) Rural-urban migration in these countries is primarily a movement of males In much of Africa and Asia, tradition does not sanction the employment of women outside the home, for example, males are employed in jobs such as house servants, which are elsewhere, as in Latin America, filled mostly by women Thus, while the volume of rural-urban migration may be to a large extent dependent upon the economic situation, the demographic characteristics of the migrants in regard to sex are conditioned mainly by long-established social patterns [13]

In Japan, Iran and a few other countries, the migration of women is somewhat more important than elsewhere in this region Although statistics of female participation in the labour force are known to be particularly erratic, they suggest that women in Japan, for example, have a much higher rate of gainful employment than is generally found in the ECAFE area, [14] and this may be the reason why they are more migrant In Japan, as in a number of highly urbanized Western countries, the female predominance is less in cities where heavy industry is concentrated and greater in cities

[12] Casis and Davis, op cit.

[13] United Nations "[illegible] tries", *Economic Bulleti*[illegible] May 1953, p 8, and [illegible] World s Working Po[illegible] *International Labour Rev*[illegible] 157, 173-176

[14] "Aspects of Urbanization in ECAFE Countries", p 8 See also chap VI of this report

having as their economic base commerce and light industry [15]

Throughout the world, the urban population has a higher proportion of young adults and a lower proportion of children than the rural population. This is obviously related to the fact that migrants to cities tend to be young adults (who may return to the villages when they have acquired a certain amount of money).

While in all regions the principal cities have a higher percentage of persons aged 15-59, and a lower proportion of those aged 0-15 than do the countries as a whole the pattern with respect to the aged is not so consistent (cf table 8). In a few countries (e g, Argentina, Brazil, El Salvador, Trinidad and Tobago, and Australia) the percentage of the population sixty years old and over

cities apparently have a lower percentage of aged persons than the country as a whole.

In general it may be said that the city carries a disproportionately small share of the economically dependent population of a country from the point of view of age groups and is less heavily taxed in this respect than the non-urban working population. Other factors however complicate the question of dependency in urban areas as compared with rural areas, for example urban workers often send funds to their families in the countryside and support non-working adult relatives who come to the city.

[15] "Aspects of Urbanization in ECAFE Countries" pp 8-9

*Table 8*

AGE DISTRIBUTION AND URBANIZATION

| Country | | Census year | Total | Under 15 | 15-39 | 40-59 | 60 and over |
|---|---|---|---|---|---|---|---|
| *Africa and Asia* | | | | | | | |
| Ceylon | M | 1946 | 100.0 | 35.8 | 42.7 | 16.0 | 5.5 |
| | F | | 100.0 | 38.9 | 42.0 | 13.9 | 5.2 |
| Colombo | M | | 100.0 | 20.9 | 59.1 | 16.6 | 3.4 |
| | F | | 100.0 | 34.2 | 46.2 | 14.6 | 5.0 |
| Egypt | M | 1947 | 99.8* | 39.8 | 38.0 | 16.2 | 5.8 |
| | F | | 99.7* | 38.6 | 38.6 | 15.7 | 6.8 |
| Cairo | M | | 99.6* | 35.3 | 42.7 | 17.1 | 4.5 |
| | F | | 99.6* | 37.7 | 42.5 | 14.7 | 4.7 |
| Japan | M | 1950 | 100.0 | 36.6 | 38.5 | 17.9 | 7.0 |
| | F | | 100.0 | 34.2 | 40.2 | 17.2 | 8.4 |
| Tokyo | M | | 100.0 | 31.9 | 44.7 | 18.6 | 4.8 |
| | F | | 100.0 | 31.4 | 44.9 | 17.7 | 6.0 |
| Korea S | M | 1949 | 100.0 | 41.9 | 38.2 | 14.9 | 4.8 |
| | F | | 100.0 | 41.3 | 37.6 | 15.0 | 5.9 |
| Seoul | M | 1947 | 100.0 | 34.4 | 49.6 | 12.4 | 3.6 |
| | F | | 100.0 | 33.2 | 45.8 | 14.2 | 6.8 |
| Malaya Fed of | M | 1947 | 100.0 | 38.6 | 36.8 | 19.4 | 5.2 |
| | F | | 100.0 | 41.3 | 39.3 | 14.5 | 4.8 |
| Georgetown | M | | 100.0 | 33.5 | 42.9 | 20.0 | 3.6 |
| | F | | 100.0 | 37.4 | 41.5 | 16.0 | 5.1 |
| *Europe, Northern America and Oceania* | | | | | | | |
| Australia | M | 1951 | 100.0 | 27.4 | 38.3 | 22.9 | 11.4 |
| | F | | 100.0 | 26.8 | 37.1 | 22.7 | 13.4 |
| Sydney | M | | 100.0 | 24.4 | 38.4 | 24.4 | 12.8 |
| | F | | 100.0 | 22.1 | 37.2 | 25.0 | 15.7 |
| Belgium | M | 1947 | 100.0 | 21.2 | 37.4 | 27.0 | 14.4 |
| | F | | 100.0 | 20.1 | 35.6 | 27.6 | 16.7 |
| Antwerp | M | | 100.0 | 19.4 | 36.9 | 29.9 | 13.8 |
| | F | | 100.0 | 17.5 | 36.5 | 30.0 | 16.0 |
| Denmark | M | 1950 | 100.0 | 27.1 | 36.0 | 24.1 | 12.8 |
| | F | | 100.0 | 25.6 | 35.6 | 24.9 | 13.9 |
| Copenhagen | M | | 100.0 | 23.3 | 37.0 | 26.9 | 12.8 |
| | F | | 100.0 | 19.5 | 36.6 | 28.1 | 15.8 |
| France | M | 1954 | 100.0 | 23.3 | 37.2 | 25.7 | 13.8 |
| | F | | 100.0 | 20.6 | 34.7 | 26.8 | 17.9 |
| Paris | M | | 100.0 | 15.5 | 41.1 | 32.7 | 10.7 |
| | F | | 100.0 | 12.2 | 39.2 | 33.0 | 15.6 |
| United Kingdom (England and Wales) | M | 1951 | 100.0 | 23.3 | 36.3 | 26.7 | 13.7 |
| | F | | 100.0 | 20.9 | 34.2 | 27.1 | 17.8 |
| Greater London | M | | 100.0 | 22.4 | 36.1 | 28.4 | 13.1 |
| | F | | 100.0 | 19.0 | 35.4 | 28.1 | 17.5 |

*Table 8* (continued)

| *Country* | | *Census year* | *Total* | *Under 15* | *15-39* | *40-59* | *60 and over* |
|---|---|---|---|---|---|---|---|
| United States | M | 1950 | 100 0 | 27 5 | 37 5 | 23 2 | 11 8 |
| | F | | 100 0 | 26 2 | 38 3 | 23 0 | 12 5 |
| New York (city proper) | M | | 100 0 | 22 0 | 37 2 | 28 7 | 12 1 |
| | F | | 100 0 | 19 9 | 39 4 | 28 0 | 12 7 |
| Detroit (city proper) | M | | 100 0 | 24 3 | 38 6 | 27 2 | 9 9 |
| | F | | 100 0 | 23 4 | 41 7 | 25 1 | 9 8 |
| Baltimore (metropolitan area) | M | | 100 0 | 25 8 | 40 0 | 24 7 | 9 5 |
| | F | | 100 0 | 23 9 | 41 0 | 23 6 | 11 5 |
| Yugoslavia | M | 1948 | 100 0 | 34 1 | 38 6 | 19 4 | 7 9 |
| | F | | 100 0 | 30 4 | 39 7 | 20 2 | 9 7 |
| Belgrade | M | | 100 0 | 19 8 | 51 0 | 23 5 | 5 7 |
| | F | | 100 0 | 18 3 | 49 3 | 24 5 | 7 9 |
| *Middle and South America* | | | | | | | |
| Argentina | M | 1947 | 99 6 ᵃ | 30 4 | 41 7 | 21 1 | 6 4 |
| | F | | 99 5 ᵃ | 31 1 | 43 1 | 18 7 | 6 6 |
| Buenos Aires | M | | 97 8 ᵃ | 19 5 | 44 2 | 28 0 | 8 1 |
| | F | | 99 8 ᵃ | 18 6 | 46 3 | 25 6 | 9 3 |
| Brazil | M | 1950 | 100 0 | 42 4 | 39 5 | 14 0 | 4 1 |
| | F | | 100 0 | 41 3 | 41 2 | 13 1 | 4 4 |
| Distrito Federal | M | | 100 0 | 28 8 | 47 1 | 19 0 | 5 1 |
| | F | | 100 0 | 28 0 | 46 9 | 18 4 | 6 7 |
| El Salvador | M | 1950 | 100 0 | 42 4 | 38 9 | 13 7 | 5 0 |
| | F | | 100 0 | 39 9 | 41 0 | 13 9 | 5 2 |
| San Salvador | M | | 100 0 | 33 4 | 46 9 | 15 1 | 4 6 |
| | F | | 100 0 | 28 5 | 49 5 | 15 7 | 6 3 |
| Jamaica | M | 1943 | 100 0 | 38 0 | 40 8 | 15 4 | 5 8 |
| | F | | 100 0 | 35 4 | 42 0 | 15 4 | 7 2 |
| Kingston (Incl Pt Royal) | M | | 100 0 | 27 1 | 52 1 | 16 7 | 4 1 |
| | F | | 100 0 | 23 6 | 54 1 | 16 2 | 6 1 |

ᵃ Excluding unknowns

*Mortality and fertility in relation to urbanization*

Some countries show a higher death rate in the city than in the total population, others a lower, but in view of the differences in age composition and in registration procedures as between urban and rural districts, these figures do not have a great deal of significance In regard to infant mortality rates, a study of a group of countries for which fairly reliable data are available shows that in most of these countries, the city has a lower infant death rate than the country as a whole (see table 9) In a number of economically less developed countries, registered but incomplete infant mortality rates (not reported in table 9) give higher figures for the large city than for the country as a whole In these cases it is quite possible that there is greater under-registration of infant deaths in the rural areas, or other statistical difficulties (See chapter II on the question of the general unreliability of infant mortality rates)

[illegible]

and in the United States In Sweden, for example, infant mortality rates in towns were considerably higher than those in the rural districts during the nineteenth century, and it is only since the 1920's that this picture has changed In the majority of countries for which data are available, the declines in infant mortality have, on the whole, been more rapid in the cities than in the country as a whole

In a few of the more advanced countries, as noted in chapter II, the rate of the decrease in the national urban infant death rate seems to have tapered off in recent years, and the declines in some of the metropolitan centres have been smaller than in the country as a whole These findings suggest that the factors of urban life which are associated with decline in infant mortality have permeated the rural areas in such countries and have been causing similar declines of rural infant mortality

With one or two exceptions (Egypt, Federation of [illegible] sion is reached [illegible]

In the more urbanized countries—those having 40 per cent or more of their population in localities with 20,000

[18] In view of the differences in sex and age structure and the problem of non resident births, comparison of crude birth rates is not too meaningful

*Table 9*

NUMBER OF DEATHS OF CHILDREN UNDER ONE YEAR OF AGE PER 1 000 LIVE BIRTHS IN SELECTED COUNTRIES AND IN ONE OR MORE OF THEIR MAJOR CITIES IN 1950

| | |
|---|---|
| *Middle and South America and Asia* | |
| Argentina | 68 2 |
| Buenos Aires | 37 |
| Brazil | 150 * |
| Rio de Janeiro | 109 |
| Chile | 153 2 |
| Santiago | 112 |
| Colombia | 150 * |
| Bogotá | 104 |
| Israel | 47 3 |
| Tel Aviv | 36 |
| Japan | 60 1 |
| Tokyo | 42 |
| Osaka | 50 |
| *Europe Northern America and Oceania* | |
| Canada | 41 3 |
| Toronto | 29 |
| Montreal | 42 |
| United States | 29 2 |
| New York | 25 |
| Chicago | 25 |
| Houston | 29 |
| San Diego | 29 |
| Australia | 24 5 |
| Sydney | 25 |
| New Zealand | 27 6 |
| Wellington | 31 |
| Austria | 66 1 |
| Vienna | 57 |
| Belgium | 53 4 |
| Brussels | 39 |
| Denmark | 30 7 |
| Copenhagen | 27 |
| Finland | 43 5 |
| Helsinki | 33 |
| France | 52 0 |
| Paris | 37 |
| Germany, F R | 55 5 |
| Berlin (total) | 64 |
| Greece | 36 7 |
| Athens | 29 |
| Ireland | 45 3 |
| Dublin | 50 |
| Italy | 63 8 |
| Rome | 42 |
| Netherlands | 25 2 |
| Amsterdam | 25 |
| Norway | 28 2 |
| Oslo | 22 |
| Poland | 107 8 |
| Warsaw | 74 |
| Portugal | 94 1 |
| Lisbon | 76 |
| Spain | 69 8 |
| Madrid | 56 |
| Switzerland | 31 2 |
| Zurich | 24 |
| England and Wales | 29 9 |
| London | 26 |
| Yugoslavia | 118 6 |
| Belgrade | 93 |

* Estimate

or more inhabitants—the differential appears, on the basis of the limited evidence available, to be less significant than in the moderately urbanized and the lightly urbanized countries

In some cases, however, the urban population may be built up to such a large extent by an influx of impoverished rural residents, who live in conditions of extreme overcrowding and low standards of living, that there is little opportunity for them to take on city traits Cer-

situation of countries which show little difference between urban and rural fertility [17] The lack of rural urban

fertility are apparently spreading into the rural areas

Available statistics show not only a general difference between urban and rural fertility, but also a tendency for fertility to decline with progressive increases in size of locality This inverse relationship between the size of locality and the level of fertility appears in both the more urbanized and the less urbanized countries, although relevant data are available for very few countries

A recent development reported in a few of the more urbanized and industrialized countries is worth note, however While urban fertility had been declining faster than rural in the United States, a slight reversal seems to have occurred between 1940 and 1950—it was related to the marked post war increase in national fertility, which was most pronounced in large cities Available information for Norway suggests an upswing in birth rates in large cities similar to that found for the United States

In the West, the decline of fertility seems to have

## URBANIZATION AND ECONOMIC DEVELOPMENT [18]

The relation of urbanization to economic development, especially industrialization, is obviously close, but complex and little understood Some minimum of

development in production, transportation and other technologies is clearly required to permit large masses of people to live together in cities The cities in turn provide concentrations of manpower and facilities which permit large-scale expansion of trade and industry The reciprocal interaction of industrial growth and urban growth in Europe during the nineteenth century is an evident fact of history

Yet cities can have many functions besides the economic ones . religious, cultural, educational, military and, especially, administrative Such non economic functions, singly or in combination, have been the chief *raison d'être* of many of the world's cities Cathedral towns, university towns and fortress towns are familiar types, and the administrative role of cities is so important that, in many countries, as mentioned above, the very definition of an "urban" area involves the concept of administrative function

There are two extreme possibilities in regard to the economic function of cities On the one hand, cities may contribute greatly through commerce and industry to the *per capita* production and the economic development of the state, on the other hand, they may, through the political power resident in them, drain off and consume the wealth of the countryside without contributing anything of economic value in return—whatever may be the value of the other functions they perform—and thereby help to maintain the country as a whole in a state of poverty and stagnation The economic role of the city can thus vary widely from "generative" to "parasitic",[19] depending on the relation of the city to the rest of the country While it is not likely that many cities are wholly parasitic today, a number of them would appear to contribute less of economic value, on the average, than they derive from the rest of the country

There is another reason why the growth of cities does not necessarily reflect a healthy economic development, as noted above, urban expansion may be more a symptom of distress in the countryside than of urban prosperity The cities can serve as places of refuge to which people flock because of adverse economic or civil conditions in the rural districts The provision of modern welfare services in cities but not in rural areas accentuates this tendency

Various observers of urban growth in Africa, Asia and Latin America have concluded that these regions are "over-urbanized" for their degree of economic development, particularly of industrialization—that the cities, as a whole, do not have the productive economic base that would be commensurate with their size and their proper functioning in the total economy[20] Frequently it will be found that one or two huge agglomerations—called "primate cities"—account for an inordinately high proportion of the total urban population (and of the national allocations for urban services) These concentrations of people and resources in primate cities may serve to inhibit the growth of medium sized cities more strategically placed for the development of various industries

In many cases, the cities in less developed areas were established in a colonial period as centres of administrative control and of export of raw materials, after independence, they have often continued to perform essentially the same functions, with the administrative control assumed by the national government

Such cities have always attracted a number of rural residents, particularly young people, looking for jobs (in trades, construction, services and administration), for small amounts of cash, city goods, excitement, or independence from their families, or more generally pursuing the hope of changing their status in life To these factors of "pull", exercised by the city, have been added, increasingly in modern times, powerful "push" factors arising from land shortage in rural areas and also from military and civil disturbances in the countryside, the latter being especially important in Asia during the Second World War and its aftermath Twentieth-century improvements in transportation and communications between the cities and the hinterland have meanwhile made rural residents much more sensitive and responsive to the different push and pull factors at work

The pressure of population on land, which contributes to what is judged to be over-urbanization in so many of the less developed countries, means, however, that these same countries are in a similar sense "over-ruralized", i e, there are too many people for the existing modes and levels of production in both the urban and the rural sectors Both sectors are economically under-developed, "over-urbanization" is but another way of describing the economic under development that characterizes the cities and their relation to the countryside

There is some evidence from census data that in at least a number of under-developed countries, rapid urbanization during the twentieth century involving large shifts of population from rural to urban residence, has not been accompanied by any significant increase in the proportion of workers in industry Table 10 shows, for a group of developed and under-developed countries, the percentage of the population living in localities of 20,000 or more at two different dates—about 1910 and about 1950 where these figures are available—and the percentage of the labour force in the different sectors [illegible] 21 [illegible] or [illegible] n [illegible] significant increase in the percentage of industrial employment in the total labour force during the forty years or so in question, although in all these countries there has been a substantial increase in urbanization In some cases, the percentage of industrial employment

[19] See B F Hoselitz, "Generative and Parasitic Cities", *Economic Development and Cultural Change*, vol III, No 3, April 1955, pp 278-294.

[20] Some participants in the World Population Conference however, "were definitely in favour of large migration to the cities even if it were only a back and forth movement which puts people at least temporarily in contact with different cultures The view was expressed that the present rate of migration from rural to [illegible] would be desirable [illegible] (*Proceedings of the* [illegible] ations publication, [illegible]

[21] The number of qualifying footnotes to this table is an indication of the fact that such data must be treated with great caution.

would appear, in fact, to have declined in the period considered (there is reason to believe that this picture may be reversing itself in view of the rapid expansion of industries in some areas in the last few years) The very slight increase shown by Egypt does not in any way compare with the growth of urbanization that has taken place in that country

[illegible]

ment The percentage of industrial employment even in the developed countries, however, has not expanded as rapidly as the percentage of urbanization, in large part this is because the expansion of mass production industry does not call for a commensurate increase in industrial employment but is usually accompanied by a sizable expansion of employment in transportation, communications, processing and distribution and other factors listed as public or private " services "

It further appears (from a comparison of the same limited groups of countries) that the economically under-developed countries of today have less industrial employ-

*Table 10*

CHANGES IN URBANIZATION AND THE STRUCTURE OF THE LABOUR FORCE

| Country | Year | Per cent of population living in localities of 20,000 or more | Per cent of labour force | | |
|---|---|---|---|---|---|
| | | | Agriculture • | Industry • | Services • |
| *Africa, Asia and Latin America* | | | | | |
| Chile | 1930 | 28 | 39 • | 30 • | 31 • |
| | 1950 | 40 | 31 • (1952) | 30 • (1952) | 39 • (1952) |
| Cuba | 1919 | 23 | 49 • | 20 • | 31 • |
| | 1943 | 31 | 52 • | 18 • • | 30 • |
| Egypt | 1907 | 9 (in localities of 100 000 or more) | 71 • | 11 • | 18 • |
| | 1947 | 29 ; 19 (in localities of 100 000 or more) | 65 • | 13 • | 22 • |
| India | 1911 | 4 | 74 • • | 13 • | 13 • • |
| | 1951 | 12 | 74 • | 10 • | 16 • |
| Japan | 1920 | 23 | 55 • | 21 • | 24 • |
| | 1950 | 42 | 49 • | 21 • • | 30 • |
| Mexico | 1910 | 11 ; 4 (in localities of 100 000 or more) | 70 • | 22 • | 8 • |
| | 1950 | 24 ; 14 (in localities of 100 000 or more) | 61 • | 17 • | 22 • |
| *Europe Northern America and Oceania* | | | | | |
| Australia | 1911 | 43 | 25 • | 34 • | 41 • |
| | 1947 | 57 | 17 • | 38 • | 45 • |
| France | 1906 | 25 | 43 | 30 | 27 |
| | 1954 | 33 | 28 | 37 | 35 |
| Sweden | 1910 | 16 (in localities of 25 000 or more) | 48 • | 27 • | 25 • |
| | 1950 | 30 (in localities of 25 000 or more) | 21 • | 41 • | 38 • |
| USSR | 1928 | 12 (1926) | 80 | 8 | 12 • |
| | 1955 | 32 | 43 | 31 | 26 • |
| USA | 1910 | 31 (in localities of 25 000 or more) | 32 | 31 | 37 |
| | 1950 | 42 (in localities of 25 000 or more) | 13 • | 37 • | 50 • |

*Sources* The World's Working Population Its Industrial Distribution " *International Labour Review* vol LXXIII 5 May 1956 pp 505 and 508 509 International Labour Organisation [illegible] *Demographic* [illegible] *of Nations* [illegible] the Development of Pre [illegible] *and Cultural Change* vol III 1 October 1954 p 17

• " Agriculture " comprises agriculture forestry hunting and fishing.

• " Industry " comprises mining and quarrying manufacturing construction and utilities (electricity gas and water)

• " Services " comprises commerce transport storage and communications, as well as public and private services

• Individuals listed as " persons not adequately described " and or " unemployed " and " seeking work for the first time " are excluded from this computation

• Does not include electricity gas and water

• Pre partition India

• Including earning dependants

• Does not include electricity gas water and sanitary services, which are included under Services

• Excludes armed forces

• Industry (small and large scale) and construction, but apparently not electricity, gas and water, etc , which are included under Services

• Transport and communications trade public feeding and material technical supply, education and public health housing and community services State administrative organs and administrative staff of co-operative and public organization and other public services

ment, as a share of total employment, than did the developed countries when the latter were at a similar stage of urbanization[21] (For example, France and the United States around 1910 had about the same degree of urbanization as Cuba and Egypt in the nineteen-forties, but much more industrial employment) Conversely, the now developed countries were far less urbanized when they had the same degree of industrial employment

Low figures for industrial employment in less developed countries do not necessarily imply that there has been no industrial growth in those countries On the contrary, it is known that industrial production has expanded significantly in a number of them But if employment in modern factory type industry has grown (more slowly than output), this growth has apparently been accompanied by a relative decline of employment in the small scale handicraft and cottage industries, and the latter decline (including decline in village handicrafts) has offset or more than offset the former growth Consequently, where the percentage of employment in agriculture has also declined—it has apparently not declined at all in Cuba and India, and in other under developed countries the decline has been much less than in the developed countries—the so called "services" are the only broad category of employment showing any general increase with urbanization

This latter category of employment does not have the same significance as in the industrialized countries, where it generally represents an essential support of industry in various forms of necessary "overhead" The large size of the "services" category in the less developed countries results, in the first place, from the lack of mechanization and rationalization of the ancillary activities that are necessary supports for industrial or other economic development, so that unskilled human labour takes the place of motor trucks, cargo loading and earth-moving equipment, servants are employed instead of labour saving equipment retail trade is carried on by thousands of petty vendors, etc In the second place, the service occupations (along with the category of "activities not defined") include large numbers of under-employed persons whose activities are not required for the functioning of the cities even at the prevailing low level of productivity street hawkers, porters, surplus servants, lottery ticket sellers, beggars, odd jobs men, and various others who sit about much of the day waiting for the chance to gain a little money

In smaller towns, where the effects of the establishment of factories or other modern enterprises like rail road depots can be observed, it has been reported that the increment in employment resulting from a new enterprise may be accompanied, paradoxically, by an increment in unemployment and in casual and irregular employment This is because the new source of wealth attracts large numbers of underemployed from the countryside who seek to obtain benefits from it, if not through direct employment, then derivatively through a filtering process whereby those not regularly employed live off those who are A small increase in industry may thus cause a disproportionate urban growth

With important exceptions, the cities of under developed countries are commercial and administrative rather than industrial centres, some have played this role for many centuries, although only in modern times achieving such vast size Great numbers of their residents today ultimately depend for income upon the export-import trade, particularly with economically developed countries Thus, profits from exports of raw materials (coffee, bananas, rubber, tin, oil, cocoa, tea, etc) support increasing numbers of urban businessmen officials, and absentee landowners and trickle down in various ways to provide the basis for urban survival of numerous low income families Rapid industrialization and mounting national income in the more developed countries, therefore, indirectly provide part of the economic basis for urbanization in the less developed countries, the more raw materials that the former countries consume, the greater the city population the latter countries will support The economic and social difficulties arising from this situation because of the vagaries of international trade are well known, so also are the difficulties arising from the fact that the import of cheap manufactured goods from abroad, which usually goes with a pattern of raw materials export, may inhibit local industrial expansion It may also, by providing cheaper goods, help to put the village weaver, blacksmith, pottery-maker or other artisan out of work and thus serve to increase rural under employment and, in consequence, urbanization The long established export import orientation of cities in less developed areas is therefore not inconsistent with a process of rapid urbanization and slow industrialization in these areas (with rapid growth of industrial production taking place elsewhere)

It is true that in Europe and the United States during the nineteenth century, many cities expanded rapidly as administrative, commercial and financial centres without large scale growth of industries within them, especially of heavy industries, but other cities (often medium sized) in the same countries were growing rapidly as industrial centres at the time, the expansion of the administrative-commercial type of city was supported by, and integrated with, a marked rise in *per capita* production in industry (and also in agriculture) In some of the economically under developed countries today, however, the expansion of the administrative commercial type of city is more closely tied up with the growth of industrial production in cities of the developed countries than with the growth of domestic industry There are important exceptions to this generalization, and a number of highly industrialized cities, such as São Paulo (Brazil), Monterrey (Mexico), El Mehalla (Egypt), and Ahmedabad (India) can be found in economically under developed countries, furthermore, there is evidence from cases of this type that a phase of industrial growth may readily follow a phase of administrative-commercial growth

[21] See "Econom c Ca [illegible]

*Table 11*[33]

URBANIZATION AND STRUCTURE OF EMPLOYMENT

| *Country and year* | *Per cent of population living in cities of 20 000 or more* | *Per cent of total active labour force*[a] *working as salaried employees or wage earners in manufacturing* | *Per cent of total active labour force*[a] *in agriculture* | *Per cent of population living in localities under 20 000* |
|---|---|---|---|---|
| *Africa and Asia* | | | | |
| Egypt (1947) | 29 1 | 5 5 | 62 8 | 70 9 |
| India (1951) | 12 0 | 3 4[a] | 70 6[b] | 88 0 |
| Malaya (Fed of) (1947) | 17 0 | 4 6 | 65 1 | 83 0 |
| Pakistan (1950) | 7 8 | 1 3 (1951) | 79 5 (1951) | 92 2 |
| Philippines (1950) | 12 7 | 4 9 (1948) | 72 2 (1948) | 87 3 |
| *Middle and South America* | | | | |
| Argentina (1947) | 48 3 | 17 3 | 26 7 | 51 7 |
| Bolivia (1950) | 14 0 | 3 8 | 72 6[c] | 86 0 |
| Chile (1950) | 39 5 | 13 6 (1952) | 31 2 (1952) | 60 5 |
| Costa Rica (1950) | 10 9 | 8 2 | 56 4 | 89 1 |
| Haiti (1950) | 5 4 | 2 0 | 85 5 | 94 6 |
| Mexico (1950) | 24 0 | 8 4 | 60 9 | 76 0 |
| Puerto Rico (1950) | 27 1 | 16 2[d] | 38 0 | 72 9 |
| Venezuela (1950) | 31 0 | 7 1 | 45 1 | 69 0 |
| *Europe* | | | | |
| Austria (1951) | 39 8 | 21 5 | 32 6 | 60 2 |
| Belgium (1950) | 42 2 | 33 1 (1947) | 12 5 (1947) | 57 8 |
| Finland (1950) | 24 0 | 18 4 | 46 6 | 76 0 |
| France (1946) | 31 4 | 18 9 | 38 0 | 68 6 |
| Germany, W (1950) | 45 3 | 27 6 | 23 7 | 54 7 |
| Netherlands (1950) | 56 4 | 21 1 (1947) | 19 8 (1947) | 43 6 |
| Sweden (1950) | 34 5 | 28 7 | 20 5 | 65 5 |
| Switzerland (1950) | 31 2 | 33 4 | 16 5 | 68 8 |
| United Kingdom, (England, Wales and Scotland) (1951) | 67 7 | 38 6[d] | 5 0 | 32 3 |
| *Northern America and Oceania* | | | | |
| Canada (1951) | 35 1 | 24 6 | 19 3 | 64 9 |
| USA (1950) | 42 8 | 26 3[d] | 12 5 | 57 2 |
| Australia (1950) | 56 8 | 25 2 (1947) | 16 8 (1947) | 43 2 |

[a] Does not include persons described as "not classifiable"

[b] Self-supporting persons only, excluding earning dependants

[c] Includes colonos and comunarios

[d] Includes unemployed persons whose status classification is manufacturing

The present extent of the disparity between level of industrialization and level of urbanization in the less developed areas is indicated roughly by table 11 (the individual figures again are often not comparable and of questionable reliability) This table shows the percentage of the population living in towns of 20,000 or more, and the percentage of the economically active population of the country working as salaried employees or wage-earners in manufacturing The latter index, which eliminates the "self-employed" and the "unpaid family workers" in manufacturing—especially found in home-crafts and handicrafts—may be considered to be a rough indicator of the degree of modern urban factory-type employment, although it does not exclude employees in cottage industries, "sweat-shops" and dwarf establishments, and there are various complications in regard to the definition of the "labour force".[34]

facturing

[34] If the percentage of the total population between [illegible] and 65 years working as wage-earners or salaried employees in manufacturing is used instead of the percentage of the [illegible] force, essentially the same conclusions follow as are [illegible] present discussion

It can be seen that in general there are many more employees in manufacturing in relation to city-dwellers in the developed countries than in the under-developed

cent of their population living in localities of 20,000 or more (Egypt, Chile, Mexico, Puerto Rico and Venezuela)

per cent in the second Yet the average per cent of the labour force working as employees in manufacturing was only 10 per cent in the first group but 24 per cent in the second Venezuela had almost exactly the same proportion of people in cities of 20,000 or more as Switzerland, but Switzerland with its decentralized industry had 33 4 per cent of its labour force in manufacturing employment, while Venezuela had only 7 1 per cent Those economically developed countries like the Netherlands, Great Britain and New Zealand, however, which depend heavily on foreign trade have greater disparity between their figures for urbanization and for manufacturing employment than do other developed countries

Table 11 also shows that the percentage of the population engaged in agriculture in less developed countries is conversely very high for their levels of urbanization In fact, the proportion of the labour force in agriculture in some cases is not far below the proportion of the

countries are engaged in agriculture,[25] maintaining animals or raising crops on garden plots or in fields outside the towns, in extreme cases, like some of the Yoruba cities of Nigeria, such towns may in fact be little more than overgrown agricultural villages It is also consistent with the tendency in some regions for the countryside to become cleared of artisans, workers in cottage industries and others not engaged in farming, as a result of the competition of city-produced goods or goods imported through cities lacking decentralized industry, the rural areas thus tend to lose such variety as they once enjoyed and become more exclusively the abode of farmers Finally, however, it reflects the fact that in under-

While industrialization from a production point of view is not extensive in most cities of less developed countries, certain products and resultants of modern industry are fairly widespread (because of imports from abroad plus whatever domestic manufacturing exists) so that the cities are more " modern " in their patterns of consumption than in their patterns of production These products include such varied items as medical supplies and equipment, bicycles, articles of clothing and canned or bottled foods and drinks, the presence of these items accounts in part for the attractive power of cities To items of a material nature must be added ideas, customs and values, originating in industrial societies, that are conveyed through various media such as motion pictures, as well as through personal contacts The products of industrialization may thus have social and psychological effects upon urban life even without any large-scale industrial development in the countries concerned, and without, therefore, certain changes in social structure and in attitudes and skills required for large-scale industrial production

It is not clear on the basis of available evidence whether programmes of rural development, including road building rural electrification, land reform and community development, which are now being undertaken in many less developed countries, will seriously decrease the flow of migrants from rural areas to the city and thus slow down the speed of urbanization It is natural to assume that with improved conditions of life in the agricultural communities, fewer people will be pushed into the cities But improvement of the backward village, by introduction of modern facilities and education, can also increase productivity and thereby reduce agricultural manpower requirements, as has been taking place in technologically advanced countries,[26] so that a greater labour surplus develops unless it is absorbed by the simultaneous growth of diversified village industries New roads make it easier for the villagers to market their crops, but they also make it easier to migrate to the city Furthermore, rural change and innovation can give more and more villagers a taste for modern life—which is primarily identified as urban—and thus increase the pull factors of the city as well as increase demands for further rural modernization There is some evidence that the provision of a few years of education is a powerful stimulant to young people to leave their villages and seek a new life in cities Available evidence also suggests that it is not necessarily the very lowest economic levels in the backward agrarian community that contribute today the most migrants to cities, the migrants come often from a

The demand for a new and better form of life is primarily a response to a perceived differential and can therefore increase as real levels of living go up in the traditional community, if with the latter process there is a heightening and widening awareness of the standards of modern life and a growing impatience with the slowness of local

[25] The 1951 census of India indicated that 15 per cent of the self-supporting persons in urban areas were engaged in primary industry (agriculture forestry fishing, stock raising and mining and quarrying) as compared with no more than 24 per cent in secondary industry (processing and manufacturing) the remainder being in tertiary or service type activities

[26] See chap VI " Conditions of Work and Employment ", which describes the large drop in agricultural employment in these countries in modern times, not only in percentage of total employment but also in absolute numbers

[27] This generalization is based on limited evidence and presumably does not apply to situations of mass flight from the countryside caused by war or famine

change It is thus difficult to predict on *a priori* grounds the exact impact of rural development upon urbanization

As pointed out in the *Preliminary Report on the World Social Situation*,[28] it cannot be assumed that the course of development in the now under-developed countries will be the same as in Europe during the nineteenth century Countries entering the process of rapid urbanization today are doing so in a world context quite different from that of Europe during the nineteenth century The newly developing countries, having the experience of other countries before them, need not and probably will not go through the same evolution of economic processes and social forms The economic facts themselves are quite different The industrial revolution in nineteenth-century Europe, for example, was preceded (and accompanied) by improvements in agricultural production, as well as the opening up of rich new lands overseas, making possible the feeding of much larger urban populations In many of the less-developed countries today, such increases in agricultural production as have taken place have frequently been offset or more than offset by rapid population increases (due to the introduction of modern public health measures), and the rural populations themselves are under nourished Consequently, the problem of feeding the swelling city populations is a serious one, it often necessitates—particularly
food whi
be spent
frequently intensified by an urban preference for imported canned foods as against domestic fresh food ) Again, in nineteenth century Europe, industry produced for a world market in which little competition existed, the manufacturers of the newly industrializing countries may find international markets well stocked with competing goods of the industrialized countries and a domestic population, predominantly rural, with little financial capacity as consumers At the same time, there is apt to be a much greater awareness among these peoples today of the potential benefits of industrial production This awareness may make them more amenable to social change The same awareness may also create impatience with any long process of building up capital equipment at the expense of consumption The standards for urban "social overheads" (housing, public utilities, educational and medical services, etc ) now accepted throughout the world are also much higher and more ...enth-century European
increase in urban
...d countries of the
twentieth century may result in a disproportionate urban growth, by bringing with it a large increase of parasitic or semi parasitic urban population, so that industrialization will thus have a powerful tendency to accelerate urbanization unless effective ways to industrialize the smaller communities are found

These considerations point to the fundamental need to view urbanization in the context of the total national economy As noted above, over urbanization is a reflection of economic under-development, and it must be solved in the general framework of development The problems of cities, including the social problems, cannot be successfully dealt with unless there is a simultaneous attack upon the problems of rural life, and a much closer integration, both economic and cultural, of the urban and the rural sectors

### Urbanization and labour[29]

Urbanization in the less developed countries today involves to a considerable degree a transfer of under-employment from village to city Modern commerce, industry and administration are expanding, but the opportunities they provide for employment of unskilled labour are generally outnumbered by the candidates, although at the same time needs for various kinds of skilled labour may remain unfilled Large numbers of those who migrate from villages must seek a living in fringe activities, live off relatives or return to their villages

> The city ward migration is typically unorganised and haphazard, the worker is unskilled and remains unskilled Frequently he leaves his family behind in the village and retains close ties with them and a feeling of belonging to the land there is a continual drifting back and forth between countryside and city by an unskilled, unstable labour force, which brings no lasting benefit to industry, to agriculture, or to the worker himself not to industry, because of the instability and high rate of absenteeism and of labour turnover not to agriculture because the worker is not on his farm long enough or continuously enough to farm well not to the worker, because this drifting back and forth costs time and money and prevents him from establishing himself anywhere with any degree of permanence [30]

Workers moving to urban areas from the countryside
apt to be unaccustomed to principles of regularity and punctuality of work, individual responsibility and depersonalized working relations inherent in modern enterprise Their difficulties of adaptation may be aggravated by cultural or racial conflicts and even by ignorance of the language currently used in the city Bad health, housing and diet have an adverse influence on their performance as workers The resulting low productivity combines with the over supply of unskilled labour to help maintain wages at a very low level
stability and qualifications

[28] Page 180

[29] Much of the following discussion of this subject is based on

[30] International Labour Office, *Report of the Director-G*
Report I, op cit., pp 64-65

The existence of large reservoirs of unorganized cheap labour serves to discourage efforts to improve working and living conditions, and tends to impede productivity campaigns and economic rationalization There is a reluctance on the part of employers to adopt labour-saving devices in view of the supply of cheap labour, and on the part of workers themselves, who fear unemployment as a consequence The adoption of capital and material saving methods, in so far as they imply greater efficiency of operation, is impeded by the lack of skill and the unfamiliarity with mechanical processes Underemployment and unemployment in the labour force, along with instability, are thus not only wasteful but also slow down the development of industry, which is concurrently slowed down by the lack of qualified and skilled manpower

The high rate of turnover in urban employment resulting from the instability of the unskilled labour force has been demonstrated by case studies in various cities of Africa, Asia and Latin America [31] The annual turnover in certain industries may reach as high as two-thirds or more of the labour force Extremely high rates of turnover have been reported in enterprises in cities of Africa south of the Sahara (see chapter VIII)

The related widespread problem of absenteeism has been made the subject of a special inquiry in India, with the following conclusion

> " The basic cause of absenteeism in India is the fact that the industrial worker is still part time peasant and until he cuts his connexion with the soil, his attendance will be irregular and his adjustment to modern industrialism insecure " [32]

The picture of an unstable, unskilled labour force is not, however, the same in the different regions and countries In Asia, and perhaps even more in Africa, many of the villagers who seek urban employment do so for the express purpose of earning a specific sum of money for use in the village, returning home when the sum has been obtained (It has been reported by some observers that higher wages in these circumstances may actually increase labour turnover, since the required cash is accumulated sooner ) In Latin America, this feature does not appear to be so pronounced, more of the migrants intending to settle permanently In the Latin American countries, also, a higher proportion of the [illegible]

[illegible]

town and country are not as great as in some other regions (except in the case of Latin American Indian migrants) Labour instability is, nevertheless, a serious problem in Latin American cities since it is produced by a variety of factors, including low wages and lack of opportunity for advancement, which cause workers to drift from one job to another, seeking to improve their lot

[31] *Ibid.*, p 66

[32] Summary of a statistical study of absenteeism in Indian labour which appeared in the Indian journal of statistics *Sankhya* quoted by International Labour Office *Report of the Director-General*, Report I, *op cit.*, pp 66-67

In the absence of adequate labour statistics, and of employment services and unemployment relief, it is extremely difficult to assess the exact extent of underemployment and unemployment among unskilled workers, particularly among those who have recently come to the city There have been various indications, however, of the seriousness of the problem In Iraq in 1949, the Ministry of Social Affairs having requested by radio in Baghdad that unemployed workers should register, 12,000 persons presented themselves for registration on the next morning [33] In Beirut, Lebanon, even among the relatively stable and prosperous city districts, in which a sample survey was recently conducted, it was found that one fourth of the persons in the sample had been unemployed or underemployed during the month preceding the interview [34]

Since the head of a family alone often cannot provide adequately for the needs of the household, other members of the family have to supplement his income This contributes further to underemployment and to the maintenance of low wages, since women, children and youths seeking supplementary income are usually willing to accept low rates of pay in occupations in which their services can be utilized as a substitute for adult male labour

Women and children share in the work in the rural economy and it therefore appears natural that they should continue to do so in the city (except in so far as cultural traditions limit the activity of women outside the home) In the city, however, the children usually work for strangers, without any kind of parental surveillance, very often they are employed in small workshops, domestic service, street trades, taverns, and other occupations which escape public surveillance even where child labour legislation exists, and which present obvious dangers to the health and morals of the children Less dangerous but still undesirable forms of child labour are piece work at home and work in factories beside the mothers [35]

[33] A G Al Dalli, ' Problems of Industrial Enterprise in Iraq ", *Middle East Economic Papers 1954* (Dar el Kitab Lebanon, Economic Research Institute, American University of Beirut), p 146

[34] C W Churchill, *The City of Beirut A Socio-Economic Survey* (Dar el Kitab, Lebanon, Economic Research Institute, American University of Beirut, 1954), p 18

[35] A recent unpublished report based on observations by a group of students of social work in one large Asian city indicates that " hordes of children are trying to support themselves or augment family income by working at street trades Children as young as five were noted selling government lottery tickets, sweets, flowers, water, food, and programmes for theatres boxing and the races Some of these worked in gangs under leaders who sought and bargained for jobs and sold the services of the children . On the fringe of the street trades were children operating various illegal schemes including the blackmail of car owners with threats to [illegible] reported [illegible] on and [illegible] ng boys [illegible] Many [illegible] were hurt in fights, battling for the chance to carry luggage Many students reported the employment of four year-old children in rolling and cutting home made cigarettes Children as young as six worked a ten hour day in a cotton mill In many families there is unquestionably actual dependence on the meagre earnings of small children."

Many women go into light industry or domestic service, but others are forced to obtain their income from socially undesirable or illicit activities Perhaps the most serious social consequence of the work of married women to supplement family income, however, is the fact that young children are left to roam the streets during the daytime—a practice that may not appear to parents of rural origin to be dangerous, since it is customary in the village community where all adults assume some responsibility for the welfare of the children of other families (generally near or distant relatives), whereas such responsibility is not assumed by the strangers in the city

The character of the migrant female labour force differs in the different regions It has been shown above, in the discussion of demographic aspects of urbanization, that females play a larger role in the migrant labour force in Latin America than in Africa and Asia In Asia, in addition to wives, the migrant females are often widows or women whose husbands have deserted them but who have family responsibilities Where the custom of early marriage prevails and remarriage is contrary to custom, there will be many women who are incapable of supporting their families in the rural areas and move to the city for this reason

The situation described in the above paragraphs—which applies particularly to labour of migrant origin as opposed to stabilized urban labour—varies with the type of city Thus, it is better in cities with steadily growing modern industries and commercial enterprises than in cities where employment is primarily in construction and other seasonal activities or in small establishments that cannot afford adequate working conditions and adequate wages for labour, and that escape labour regulations In the former type of city, there is more mobility upwards and less horizontal mobility There are also wide variations in the extent to which migrant and other urban labour is self-employed in handicrafts and artisan trades, often organized as family undertakings. When these are prominent, as in various old cities of Asia and the Middle East, the workers may avoid some of the instability but also lack the opportunities for improved levels of living of the modern industrial city

In recent years, the importance of stabilizing the wage earners at or near their places of employment in cities has been increasingly emphasized as a factor in general economic progress and in the improvement of the living and working conditions of the wage earners themselves Various legal and pract
or recommended Tl
wages for unskilled wc
ment services, the de
vocational training facilities, the provision of paid weekly days of rest and annual holidays conditional upon steady work, the provision of welfare services, hospitals and medical care, feeding schemes for workers, adequate housing for their families, schools for children, etc Under the concerted action of Governments, municipalities and private enterprise, there are now, in many cities in less developed countries, numerous places of work where conditions of employment are satisf

and where comparative stability has been achieved with a corresponding reduction of labour turnover and increase in productivity Such circumstances, however, are found mainly in large public and private enterprises or services and cover only a small minority of the recent rural urban migrants For many of the migrants the possibility of return to the countryside constitutes the only form of social security

It is clear that a general solution of the problems of the unstable and underemployed migrant labour force must involve long range measures that extend even into the countryside, affecting the education and training of rural youth and the orientation of potential migrants prior to departure as well as after arrival in the cities [36] It is also clear that progress in the solution of these problems will both affect and be deeply affected by progress in the whole field of economic and social development, including, for example, industrialization and education

## Patterns of urban growth and housing

The rapidly growing cities of the less developed regions of the world generally have several districts or zones which are imperfectly integrated

(1) A modern commercial, administrative, and upper-class residential centre

(2) An "old city" of narrow streets and densely occupied buildings,

(3) A zone of huts or shacks, within or without the city limits proper, lacking most urban features except density of settlement and urban types of employment among the residents

This pattern has many variations In some cases, particularly in Asia and North Africa, the modern city is completely separate from the old, and the latter has retained its traditional artisan industries, commercial activities (e g bazaars) and social organization, often being divided into sharply defined quarters along ethnic or religious lines A few of the old cities (e g Damascus) have grown to considerable size with only a minor admixture of modern elements In other cases, particularly in Latin America, the modern city and the old are intermingled, with the recent expansion of the former sometimes almost obliterating the latter, or reducing it to a zone of deteriorating tenement houses In most of Africa south of the Sahara, and in various industrial, mining, and oil producing centres in other regions, the old city has never existed

The zone of huts or shacks is usually on the periphery of the city In some cases it is made up of coherent villages maintaining traditional values and social controls similar to those of the rural villages, more frequently however, this zone consists largely of amorphous mushrooming shantytowns, lacking any formal administration

[36] For a discussion of measures relevant to the problem of the underemployed and unstable labour force in cities of less-developed countries, see ILO, *Report of the Director-General*, Report I, *op cit*, especially pp 81 82, and "Problems of Manpower and

or any apparent informal social organization. Such shantytowns may be outside the administrative boundary of the city, so that no authority is responsible for providing urban services and enforcing housing regulations; even when the shantytown is within the city limits, however, the municipal authorities may pay little attention to its needs, particularly if, as is often true, the residents are "squatters" with no legal right to the land on which they build their shacks.

The pattern of urban growth is also complicated by the location of factories, usually around the periphery of the cities; their workers may come from neighbouring shantytowns or from more substantial workers' housing built by the employers or the State.

Under present conditions, the great majority of the urban poor are housed either in the older parts of the cities or in the peripheral villages and shantytowns. Except for housing built by employers for their own workers, there has been very little private construction with rents or purchase prices within the means of even the better paid workers. Public low cost housing and "aided self help" housing, while increasingly important, have in most cities thus far reached only a limited part of the low income groups.

Whether migrants to the cities move into the older tenement slums or into peripheral shantytowns depends on various factors, including the extent to which there is dwelling space in the existing structures in the older parts of the city or vacant land on the periphery or elsewhere. Peripheral shantytowns spring up on land that is not being used for one reason or another. The occupant may simply set up a hut as a squatter, may pay a small rent to the owner of the land or, in the case of some better organized groups of workers, may obtain recognition from the Government of his right of occupancy. The land is often unused because it is undesirable or unsuitable for permanent buildings. It may consist of swamps (as in certain districts of Bangkok), steep hill sides (as in the *favelas* of Rio de Janeiro) low ground subject to flooding (as in the outskirts of Baghdad), or refuse dumps. Waste areas of these types may be found near the centre of the city as well as on the outskirts. In other cases, the land is too arid for cultivation and outside the scope of the city water system. Many shantytowns also occupy land that is held vacant by urban investors in anticipation of future city growth, so that the occupants face eventual eviction; these include shacks on scattered vacant lots in the inner parts of the cities.

The quality of the dwellings in the peripheral areas varies with the occupants' incomes, security of tenure, and standards of housing (the last usually derived from rural village housing). There may be a progressive change in the character of the improvised housing as the migrant stays longer in the urban area.[37] The best of the peripheral settlements can sometimes be raised to acceptable standards by methods of aided self help—provision of some building materials, tools and advice—plus enforcement of minimum sanitary and occupancy regulations, provision of safe water supplies, sewerage, electricity and paved streets. The lack of any community identification, however, in dwelling areas which the occupants themselves may regard as temporary and makeshift, as well as the lack of any formal or informal types of social organization, may render difficult group action for local improvement.

The occupant-built peripheral zones are able to develop more freely in the cities of sparsely peopled countries in Africa and Latin America, where desert or other uninhabited land is often found at the city limits. In densely populated parts of Asia, the sudden massive movement of population to the cities, particularly the waves of refugees, has often forced the creation of shantytowns, but as a rule, the growth of peripheral shantytowns is limited in such places by the fact that land is intensively cultivated up to the edge of the city and thus too valuable for occupation by migrants. This difficulty has not prevented rapid city growth, but it has resulted in the most extreme overcrowding, both in the older parts of the cities and in the improvised slums that have sprung up on the few available pieces of vacant land—river banks, swamps, even the city streets; many also live on boats in rivers, canals and ports. It is well known that thousands of working class individuals and families in Indian cities have no shelter at all, sleeping in the streets. In the tenements of some Asian cities, families that occupy a single room may subdivide it by horizontal and vertical partitions and sublet the resulting windowless cubicles to other families. Under these conditions of extreme competition for housing, rents naturally become exorbitant in relation to incomes.

Such overcrowding also contributes to the unstable character of urban labour in Asia. The man who migrates to the city looking for wage labour is not tempted to bring his family from his home village if they will have to sleep in the street, although he might be contented with an improvised shack. The single worker may crowd in with a family of relatives or fellow villagers, sleep in an alley, or even sleep in the premises of a sweatshop, until he has earned enough to return home.

From the limited evidence available, it would appear that the housing situation in many cities, particularly in Asia, has actually deteriorated in recent years, since new building has not kept up with the natural increase in urban population, let alone the flood of migrants.

At the same time, an expansion in demand for housing has been noted that is not entirely accounted for by the growth in population; it relates especially to the lower middle class, the white collar employees and the better paid workers. These groups have generally been housed in the older parts of the cities in quarters that

[37] In the city of Tunis it has been [illegible] ... work of a 'bidonville' and still later a rural type house similar in every respect to a village house of the rural hinterland." (P. George, *La ville: le fait urbain à travers le monde* (Paris 1952) p. 282)

are cramped, deteriorating, and expe[illegible]
cities with eff[illegible]
tion d[illegible]
Often t[illegible] is actually shrinking, owing to demolitions as the modern commercial and upper-income apartment district expands At the same time, these groups have strongly felt needs for better housing and their incomes and their standards are simultaneously rising under conditions of econom[illegible] development, particularly amo[illegible]
The tre[illegible]
s[illegible] newly married
co[illegible] need for separate living quarters In general, such white-collar employees and the better paid workers appear to be the main beneficiaries of present low-cost housing programmes, where these have been undertaken

The city administrations everywhere are searching for means of providing more housing. The relative empha sis that should be given to public construction of low cost dwellings, encouragement of private construction through various fiscal measures, formation of co opera- tive house building societies, and assistance for the workers in building better houses for themselves, is a matter of current study and debate

The housing problem, however, cannot be solved simply by concentrating on construction of houses In the first place, the rapidity of city growth resulting from rural migration can overwhelm even the most ambitious housing programme It has even been reported that new construction for low-income groups sometimes encourages a larger flow of migrants and thus diminishes the slum population not at all The extent to which the less developed countries can or should reduce their rates of city growth by actually restricting rural migration is a debatable question In most cases, so little is known about the characteristics and movements of the migrants that it would be hard to devise effective measures to limit their influx Attempts have been made in some territories to prevent migrants from coming to or staying in the cities unless they have steady employment but these attempts do not generally seem to have been very effective, and as a matter of general policy they raise questions of interference with the rights of citizens It is clear, however, th it effective housing programmes will require more extensive information on currents of migration and their causes and will also require co ordination with broader national policies relating to the migrants Further research and more extensive information are particularly required on the practicability of "decentralized industry" and of "garden cities" as means of relieving present and future urban pressures in the less developed areas

The housing problem goes beyond the question of construction, in the second place, because much of the population now living in the[illegible]
to urban lif[illegible]
These group[illegible]
better housi[illegible], they also lack certain standards of space, cleanliness, and appearance for their dwelling, as well as incomes permitting them to maintain these standards without depriving themselves of other necessities If these conditions are not met, new housing is likely to deteriorate rapidly through lack of maintenance, and the occupants will smuggle in lodgers to supplement their incomes and thus reproduce the former overcrowding An effective housing programme therefore re[illegible]s intensive efforts by social worke[illegible]s
to help [illegible]
livi[illegible] other measures
in t[illegible] to eliminate underemployment and to raise wages that are too low to sustain a decent level of living

In the third place, most of the cities of the less developed countries (like cities elsewhere) have grown in a chaotic fashion, with adverse effects on their economic functions as well as on the living conditions of their people The huge and rapidly growing populations in some of these countries, particularly in Asia, indicate that continuing urbanization will eventually result in "conurbations" even larger than those of Western Europe and the north eastern United States—regions in which cities have grown to meet each other and form a nearly continuous urban expanse of hundreds of square miles and tens of millions of people It appears likely that present conditions of overcrowding, discomfort and inefficiency will be perpetuated on an ever larger scale, unless there is more systematic regional develop- ment, unless land use is planned for areas much broader than the present cities and unless the residential areas of the cities are co ordinated with their economic functions and with the expansion of water, power, and transport systems, schools, hospitals, and many other urban services and facilities

Regional planning must take account of the probable future distribution of the expanding population, in relation to transport and place of employment Although many low-cost housing projects are taking the form of multi-story apartment buildings, it is likely that in most cities of under-developed countries such apart- ment buildings will not be feasible for the expanding mass of low income residents, the greater part of whom will be housed in small dwellings which will require a great deal of land in view of the number of people in- volved (particularly if the widespread demand for plots permitting gardening is met) Transport will un- doubtedly continue to be one of the most difficult problems, and co-ordination of the location of factories and other places of employment with housing develop- ment will be required in order to eliminate two evils now commonly found (1) excessively expensive, time-con- suming, and over-crowded transport between working- class homes in the periphery and jobs in the centre, (2) shantytowns crowded around factories so that their occupants can avoid transport difficulties It is unlikely that income levels in the cities of the less developed countries will rise enough in the near future to result in the extreme congestion of automobile traffic now harassing the most highly industrialized countries, but even the present number of automobiles is often enough to crowd the narrow streets of the central parts of cities In many cases, bicycles are the most [illegible]
and convenient means of transport, and

factor to be taken into account in planning the optimum distance of residential and industrial areas

The problems of administration and local self-government, arising from the spread of cities beyond their nominal boundaries, have not been satisfactorily solved even by the countries with the longest experience of urbanization, over-lapping, confusion and failure of co-ordination occur among authorities of separate municipalities and among authorities at different levels (e g municipal, county, provincial, national) in dealing with what is in effect—from an economic, demographic and social point of view—a single metropolitan area In the less developed countries city administration is made more difficult by the fact that a high proportion of the city population is unstable, without legal residence and without a sense of identification with the city

### Urbanization and health

Prior to the twentieth century, health conditions in cities throughout the world, as reflected in general and infant death rates, were worse than in rural areas [38] The greater availability of medical care in the cities did not compensate for the increased exposure to disease caused by overcrowding and the contamination of urban food and water supplies City populations, particularly in the warmer regions, suffered more than the rural from periodic decimation by epidemics of cholera, plague, yellow fever, and smallpox Improvements in public health measures have been among the most important factors permitting the modern large scale growth of cities, not only because they have fostered general population increase but also because they have counter acted the adverse effects on health of dense urban settlement

As noted above, and shown in table 9, comparative infant mortality rates indicate that in a majority of those countries—mostly developed countries—for which reliable data are available, general levels of health today are apparently somewhat higher in the major cities than in the countries as a whole It is not known, however, whether the urban advantage is generally found in less developed countries now undergoing rapid urbanization, in certain parts of the world, urban health conditions would appear to be worse than rural health conditions It is possible, although not demonstrable, that in recent years infant mortality rates have fallen more rapidly in the cities of the less developed countries than in the countries as a whole—a trend that might be expected to result from the important expansion of infant and maternal health services primarily in the cities, as well as from improved urban environmental sanitation

There are now few if any countries in which urban health conditions are bad enough to prevent the rapid growth of cities through rural-urban migration, but in the urban areas of the less developed countries in general, disease and chronic ill-health still impose an enormous burden of misery, maladjustment, and wasted productive power

Some causes of ill-health are more characteristic of the countryside than of the cities, but are brought to the cities by rural migrants and persist or spread because of the conditions under which the migrants live Trachoma and intestinal parasites fall into this group Other rural diseases (malaria, bilharziasis and yaws) tend to disappear sooner in the cities because of the absence or the control of vectors, the availability of treatment, or other reasons Certain diseases, however, are particularly favoured by the overcrowding and dirt of the city slums and appear to be more common in the cities than elsewhere The most widely important of these is tuberculosis, which is often the leading cause of death in the cities, according to one estimate, the rate of positive tuberculin reactions among adults in Cairo, Alexandria and other cities of Egypt approaches 95-98 per cent [39] Pneumonia and other respiratory diseases and venereal diseases are also generally more prevalent in the cities than elsewhere, the latter are often carried back to previously unaffected villages by returning migrants The intestinal diseases spread by contaminated food and water (diarrhoea-enteritis, amoebic dysentery, typhoid fever) are likewise serious problems in the cities, although it is not clear whether they are generally more important there than in rural areas In many cases, the resistance to disease of the urban poorer classes is weakened by malnutrition, which may be particularly serious among recent migrants

The extent to which the cities at present provide medical care for their populations, of course, differs widely, it appears that the concentration of physicians and hospitals in the cities is today increasingly being made use of, while public health services are more and more reaching the masses of the urban population, for example through vaccination and inoculation programmes

Among the urban poorer classes, and particularly among recent migrants, modern medicine competes with traditional methods of healing and also with commercial nostrums whose claims may be uncritically accepted These methods may have some adverse effects on health, and may be a serious drain on meagre incomes, but it does not appear that in general today they hinder the urban poor from also seeking modern medical assistance when they can get it Often there is an alternation or combination of traditional and modern methods

There are also wide variations in the extent to which the cities are providing safe water supplies, enforcing sanitary regulations and food standards, and limiting overcrowding Most of the cities in question are now able to provide enough health and sanitary services to prevent major epidemics, but not enough to eliminate conditions making for a high level of morbidity While the larger cities generally have piped water supplies protected by chlorination, there remain many cities in which the municipal water supply is unsafe More often,

[38] *The Determinants and Consequences of Population Trends* (United Nations publication, sales No 1953.XIII 3), pp 52 53 and 66-67

[39] J S Simmons and others *Global Epidemiology* (Philadelphia, 1951)

the water supply is quantitatively inadequate and does not reach the rapidly growing peripheral slums Some of the slum dwellers carry water for long distance from public taps, or are supplied by tank trucks or water vendors, in these cases, they are unlikely to use much water for personal or household cleanliness Others obtain water from unprotected wells or running streams that are also used for sewage disposal or are polluted by industrial wastes Sewage systems also frequently serve only the central part of the city, in many of the slums there are not even protected latrines—only back yards and vacant lots in which barefoot children play In view of the large numbers and shifting identity of petty vendors, regulations for sanitary food distribution are hard to enforce, particularly for milk and fresh vegetables The vendors cannot afford refrigeration, sanitary packaging is rare, and foods for sale are often exposed to dust and flies in roadside markets

Occupational health is also a serious problem The larger factories are usually subject to inspection and effective regulation, and are often required by law to provide medical facilities for their workers Conditions in the numerous small workshops, however, and among piece-workers at home, are rarely under effective regula tion "Frequently, the workplaces are dirty, badly illuminated, ill-ventilated, overcrowded and equipped with unprotected machinery The appalling environ mental conditions found in some workshops have to be seen to be believed "[40]

The effectiveness of medical services and child and maternal health services in the cities of the less developed countries will probably continue to improve, there is a growing demand for such services, a demand that increa- ses as the migrants become aware of their existence and their advantages Improvements in health in the cities in question, however, depend on general improvements in levels of living—particularly diet and housing—as well as on improved medical care A great deal of the present ill health would be eliminated by more adequate water supplies and sewage disposal Another impor- tant prerequisite is health education—in many cases, the mass of the urban population, particularly the popula tion of recent migrant origin, has yet to be convinced of the importance of pure water, sanitary systems of garbage and sewage disposal, personal cleanliness, and balanced diet (particularly for children) It is probable that the newer urban residents are readier to accept modern medical care when ill than to change their personal habits that lead to disease

In general, there is very little evidence on the health conditions of recent migrant families as such, and as compared with the rest of the urban population and with the rural population, health statistics do not make a distinction of this kind It can be assumed on *a priori* grounds, however, that migrant families belong to the poorest segment, live in the worst housing, work at jobs least protected from a health point of view, are more apt to be under the influence of traditional medicine, etc For these groups, it is quite possible that urbanization means an actual decline in the level of health from that obtaining in the countryside prior to migration—a situation continuing until such time as health education and health facilities have their effects and the level of income is sufficient to permit adequate food and housing

There is even less evidence as to the impact of urbani- zation on the mental health of migrants Many authori ties are of the opinion that the urban environment *per se* is more conducive to mental illness than is the rural environment The city involves a faster, tenser, more demanding mode of life, and it places a greater burden on the psychic structure of the individual, who must make his own way and gain recognition and importance according to his own achievements, while in the traditional rural community he usually follows a pattern handed down to him and reinforced by the extended family and community In the small urban family, the intensified relationships between husband and wife and between parent and child (considered below in discussion of the family) bring psychologic[illegible] due to jealousies, [illegible] tilities, that can be incom[illegible]

[illegible] other hand, anthropological and psychological studies have demonstrated the existence of mental illness in varying forms in many different environments, including stable rural societies The very monotony of rural life and the rigid controls of the family and com- munity may be associated with both individual and group pathological outbreaks

Some observers have concluded, on the basis of trend data for mental hospital admissions, that in the United States the development of an urban industrial society and accompanying social changes over the past century, "with the multiple and often conflicting pressures on the individual that they appear to have brought in their train, have been without effect on the inciden[illegible] psychoses [41] (Such data [illegible] [illegible] atic affections— [illegible] of mental illness) In the United States, there does not appear, at least at the present time, to be any large difference [illegible] logical [illegible] same [illegible] subjected [illegible] of social mobility usually [illegible] have higher than average rates of mental abnormality, although there may be a selective factor at work [43]

In any case, it seems reasonable to conclude, again on *a priori* grounds, that urbanization under the conditions

[40] Dr A M Critchley The Health of the Industrial Worker in Iraq ', paper presented at the Fourth United Nations Social Welfare Seminar for Arab States (Committee IV), p 2.

[41] H Goldhamer and A Marshall *Psychosis and Civilization* (Glencoe Illinois, The Free Press, 1953) pp 12 13

[42] L. G Burchinal, G R Hawkes and B Gardner, "Adjust- ment Characteristics of Rural and Urban Children", *American Sociological Review*, vol. 22, No 1 February 1957, pp 81 87

[43] O Oedegaard, "Emigration and Insanity", *Acta Psychiatrica et Neurologica*, Suppl 4, 1932 B Malzberg and E. S Lee, *Migration and Mental Disease A Study of First Admissions to Hospitals for Mental Disease New York 1939 to 1941*, New York Social Science Research Council, 1956, and A B Hollingshead, R Ellis, and E Kirby, "Social Mobility and Mental Illness", *American Sociological Review*, vol 19, No 5, October 1954, pp 577 584

in which it is now taking place in the less developed countries, involving the many problems of social dis- [illegible] personal insecurity that have been described [illegible] an adverse effect on [illegible]s of migrants Also among observers in countries of this type, there is a fairly general consensus as to an increase in mental pathology, particularly in the sphere of psychoneurosis, behaviour disorders and psychosomatic affections This subject will demand a great deal of systematic research in different urban and rural environments before any more specific conclusions can be advanced

### Urbanization and nutrition

In the more economically developed regions, the process of urbanization has necessarily been accompanied by increasing productivity in agriculture, so that one family of workers on the land can now provide food for as many as five families of town dwellers or even more The increase in productivity is even more striking when it is considered that there has been also a shift in diet from cereals and other cheap energy-producing foods to meats, dairy products and other foods that are more expensive in terms of land and labour In the economically less developed countries now undergoing rapid urbanization, however, increases in productivity are only sporadically visible,[44] several families of cultivators are still required for every urban family and yet urban dietary levels are relatively low

With the rapid growth of cities, serious problems of urban food shortage have frequently arisen because of the incapacity of the existing agrarian system to expand its production to meet new needs, difficulties of transportation, and other factors

Existing information is too limited to permit any confident generalizations as to trends in urban diets in the economically under-developed countries now experiencing rapid city growth In particular, the impact of urban life on the diets of rural migrants appears to be extremely varied, depending on whether the migrants secure regular employment at satisfactory incomes, whether, if males, they have come singly or with their families, whether their employers or the municipal government assume any responsibility for their diet, whether they are used to purchasing food, whether foods to which they are accustomed are available in the city, etc

While there are not many data available on these problems, a study of the limited experience gained in some areas is of interest Thus, it would appear likely that any significant rise in national incomes would lead to a general increase in food consumption levels, especially of the more expensive foods, including not only protective foods such as animal products, fruits and vegetables but also other foods like sugar and fats and beverages like tea and coffee Any significant changes in the consumption of these foods would have important effects, both good and bad, on nutritional levels of the people

Japan is of particular interest in this connexion since it is the most highly urbanized and industrialized country in the Far East and may serve as a pointer to future developments in under-developed areas In a period of only eight years from 1930 31 to 1938 39, there were increases in the *per capita* consumption of milk, meat, sugar, fats and tea ranging from 13 to nearly 40 per cent More direct evidence of the effects of urbanization is also available in the case of Japan from the national nutrition survey conducted annually since 1946 Calorie intakes have been slightly lower in urban than in rural areas, possibly due to the more sedentary character of urban living, reflected also in a somewhat smaller consumption of basic energy-foods like cereals and potatoes The consumption of protein rich and other expensive foods, however, is higher in urban than in rural areas In the three year period 1951-53, for example, the consumption in towns was found to be higher (in grams *per capita*) than in the rural areas as follows milk and milk products 90 per cent, meat 157 per cent, eggs 65 per cent, fish 21 per cent, fruit 39 per cent, sugar 25 per cent, oils and fats 42 per cent Diet surveys in a few other countries also point to similar trends in food consumption For instance, a comparison of the diets of different sections of the Indian population, based on a number of surveys carried out during the period 1935-48, shows that the percentage of total calorie intakes derived from fish, meat, fruits, vegetables, sugar, oils and fats was appreciably higher in each case for industrial than for agricultural workers [45]

These and other available examples thus indicate that the present trend towards a greater degree of urbanization, when associated with the raising of national incomes should, by and large, improve nutrition While this picture may appear to be generally reassuring on the surface, it should be noted here that urbanization, whether or not accompanied by higher incomes, does not always lead to nutritional improvement On the contrary, there are several instances to show that, in the absence of necessary measures to safeguard nutritional interests, the diets of rural people can quickly deteriorate when they move to urban centres Surveys have shown that a normal rural diet of coarse grains may often be replaced by a diet of processed grains that is nutritionally inferior

Educational and other nutritional measures, such as supplementary feeding programmes for mothers and children are necessary in order to ensure that the observed trend towards greater urbanization in many under-developed countries will not lead to a deterioration in nutritional levels but will actually be directed towards better nutrition A significant factor to be noted in this connexion is that rural diets are based mostly on self-production whereas urban diets will consist largely of purchased foods Therefore, proper guidance on food budgets and shopping would be valuable, especially in the initial stages of the transition from rural to urban living

Rural migrants to the cities do not, however, become "urbanized" overnight in their ways of life, and many of

[44] See chap IV

[45] Food and Agriculture Organization, *Problems of Food and Agricultural Expansion in the Far East* (Rome, November 1955)

them continue to produce some of their own food, by cultivating gardens or raising pigs or chickens A 1951 study of a group of urban families in India found that home production accounted for 16 9 per cent of the imputed value of their food consumption (compared with 55 8 per cent for rural families) [46] In some of the small African cities home food production is encouraged by the allocation of suburban plots of land to the migrants, elsewhere, the raising of fowls and livestock in peripheral shantytowns no doubt complicates urban health problems

### THE FAMILY IN TRANSITION

It has become accepted almost as a truism that urbani zation is disruptive of family life, as that life is known in the rural village Physically, the mere fact of separation —of the migrating youth from his parents, the migrating husband from wife and children, or the migrating con jugal unit from the wider kinship group—is in itself a disruption of existing family life Economically, the shift from family enterprise, common in agrarian society, to paid employment on an individual basis removes a force traditionally binding the family members together Psychologically, the shift to urban individualism and greater equality of family members may undermine the established pattern of authority and personal relations within the family New adjustments are eventually achieved in the urban community, but the cost in the meantime is often great

While this picture of family disruption has wide application, it is by no means universal, and there are many variations [47] In some places, family bonds (particularly marital bonds) are maintained, even strengthened, under the impact of urbanization, while in others, the situation degenerates into an anarchic individualism in which little or no responsibility is felt towards family or community Furthermore, by no means all rural people who migrate to cities come from stable families and communities In parts of Latin America and elsewhere, many of the newcomers to the cities are drawn from classes of semi-migratory plantation workers and share-croppers among whom irregular families are at least as common as they are in the city slums Where distances from village to town are short, as in Japan, family contacts can be more easily main tained by migrants Where the urban economic system is dominated by family enterprises of the artisan type and especially where property is owned and transmitted on a collective family basis, as in some cities of Africa,[48] economic forces in the city may continue to foster family cohesion

While an "extended family" system, embracing a number of relatives and headed by a patriarchal elder or council of elders, has been common in some areas, such as China and India and much of the Middle East and Africa, elsewhere other types of rural family system prevail ranging through various intermediate forms to simple conjugal units (husband and wife plus their chil dren) The latter types, rather than large and tightly organized extended family systems, are found in much of South East Asia [49] Urbanization would logically imply less disruption of traditional family structure in such cases than in cases of rigid and complex extended family systems, since the traditional structure is not too different from that which the urban environment tends to encourage

Wherever the rural family has already been deeply affected by modern influences—through the establish ment of easy transportation and communication with cities the introduction of an urban type market economy and of wage labour, the spread of education and of ideas of individualism, etc —then the process of urbanization will be less drastic in its implications for family life because the rural urban gap will already have been narrowed This is now the situation generally in the economically developed countries and the problems of family transition are correspondingly less severe, on the average, in these countries than in under developed countries or than in the developed countries at an earlier time However, it is also true that in rural areas of under developed countries, extended family systems, clans and other broad kinship groups as well as tribal groups, have been declining, as a rule, for some time

The rhythm of urban development also varies from country to country, even from city to city, and with it the manner in which traditional family systems are being adapted, transformed or destroyed Much depends on whether rural migrants plunge immediately into [illegible] e modern city or move by [illegible]

to [illegible] ceed—

t [illegible]

t [illegible]

[illegible] ociological analysis has laid particular emphasis upon the role of modern industry as a disruptive factor, because of its demands for a labour force employed on the basis of individual ability rather than family con nexion its requirements of physical mobility and of separation of work and home life, the employment it gives to women outside the home the objective, imper sonal and rational orientations and values it encourages, etc As noted above, however, the extent of actual employment in modern industry in the cities of less developed countries is still quite small, so that it cannot explain widespread family disruption, although ideas, attitudes and values as well as legal codes deriving from industrialized societies may have a much wider influence

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[46] "Post War Studies of Family Expenditures" *International Labour Review* December 1956

[47] One or two recent empirical investigations, of admittedly limited scope have shown little fam[illegible] tion, contrary to e[illegible] *Economic Weekly* [illegible] zation Without Br[illegible] vol LXXV, No [illegible] calls for a great [illegible]

[48] See J Comh[illegible] Belgian Congo", *The American Journal of Sociology*, vol LXII No 1, July 1956 pp 8-13

[49] See, for example "Social Services in Burma, Report of a United Nations Social Services Mission to Burma", TAA/BUR/9 1 October 1955 this report also calls attention to the relative equal ity of women in Burmese rural society

Nor is the disruptive effect of industry inevitable Where modern industry is highly decentralized and organized about household production, as in sectors of the Swiss watch industry, the effect on the family will presumably be lessened In Japan, the very strong family system not only did not seriously deter urban industrial employment or the creation of business corporations, but in some respects facilitated these processes "Evidently the Japanese family principle as it came down from the past has tended even to impart cohesion and strength to other forms of corporate life in modern times "[50]

Urban life may have different implications for family structure in the different classes In some regions, as in much of Latin America, strong family systems are found among the upper classes but not among the low-income classes of the urban population [51] In fact, in the most highly industrialized countries of Europe and Northern America, a great many large enterprises were developed on a family basis, so that ownership and management have been more likely to imply extended family action than has wage earning employment

For a long time it was widely believed by sociologists studying Western culture that modern urban life was inherently inimical to the family and that the family was gradually disintegrating under its impact Mounting divorce rates and declining birth rates, together with the decline of the extended family as an economic unit, were cited in support of this view More recently, authorities on the family have come to the conclusion that this picture has been overdrawn and that the family is not in fact breaking down in modern industrial society [52] In a country like the United States, most divorces occur in the early years of marriage among childless persons who do not hesitate to re marry and establish new families, and the proportion of the population married and living with spouses is the highest that it has ever been in the history of the census [53] Some observers believe that higher divorce rates in urbanized societies may reflect in part a shift in the nature of the family, with greater importance attaching to individual spouse relationships and a corresponding greater need for personal compatibility (see below) The decline in birth rates has meanwhile stopped in practically all the more industrialized countries (see chapter II)

Recent studies in a few cities of the United States and the United Kingdom suggest that among the great majority of well established urban families, the kin group or extended family actually plays an important part in the life of the metropolis, although the ties have become loose and informal [54] Most families in the cities studied appear to visit relatives frequently and to have closer ties with them than with co-workers, neighbours and other friends, often maintaining contact with as many as six or more related families Moreover, they exchange various kinds of assistance (baby sitting, help during illnesses, financial aid, business advice, help in finding jobs) and participate in ceremonies with an extended circle of relatives who live scattered throughout the city or even in other parts of the country. Undoubtedly, there are large numbers of persons in such cities to whom the most pessimistic conclusions regarding urban demoralization, atomization and *anomie* apply, but it seems probable that for the great majority these evils are reduced once urbanism has become an established and settled way of life

Conclusions from research in a highly urbanized country like the United States, where rural urban differences have been minimized, do not, of course, apply to economically less developed areas, except in so far as they suggest that urbanism *per se* is not necessarily antagonistic to extensive family contacts In the less developed countries, for demographic reasons, a larger proportion of the city dwellers will have most of their family roots in the rural districts Furthermore, the "aloneness" of the individual or small conjugal family in the city is not necessarily a matter only of lack of possible contacts with kinsfolk If the culture contrasts are great, it may be also a psychological phenomenon arising from the fact that the individual is leaving behind the traditional ways of life identified with his kinsfolk and endeavouring to become part of the modern urban culture in which he has few if any deeply rooted contacts, he therefore lives in a no man's land between two cultures, dissociated from the old and not yet settled in the new

Whatever its particular type, the traditional family in rural areas of less developed countries ordinarily embraces many more functions than does the family in the city It is an economic unit as well as a social unit, in that the various members of the family contribute to the process of production, which is carried out in the home or nearby It educates the young, tries to keep the behaviour of its members within locally accepted norms, often performs religious functions, and, to the extent its resources permit, cares for the aged, the handicapped, and orphaned children Thus, whether or not

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[50] W W Lockwood *The Economic Development of Japan Growth and Structural Change 1868 1938* (Princeton University Press 1954) p 497 Recent evidence indicates that since the Second World War the Japanese family has been moving rather rapidly away from its traditional patterns of filial piety wifely submission and strong control by the family head for reasons not necessarily connected with industry including new constitutional and legislative provisions concerning the inheritance of property

[51] Fustel de Coulanges in his classic study of "The Ancient City", noted this same phenomenon in the early cities of Greece and Rome and considered that family religion in the form of [illegible]

[illegible] important, because the society is dependent *more* exclusively on it for the performance of *certain* of its vital functions" (T Parsons, R F Bales *et al* *Family Socialization and Interaction Process* (London, Routledge and Kegan Paul Ltd, 1956) pp 9 10)

[53] Parsons and Bales, op cit., p 5

[54] See *A Social Profile of Detroit 1955* and other publications of the Detroit Area Study of the [illegible]

deviant relatives and the support of needy ones

In the change to an urban environment, the family usually loses its economic functions (from the production point of view), it comes to depend for support on one or two wage earners rather than on the collective labour of its members It loses its educational functions, the children go to school instead of learning a traditional means of livelihood by assisting the grown-ups Urban housing conditions limit the number of persons who can live in a single household and thus the ability to take in the aged or the orphaned children of relatives

Other functions of the family, however, become intensified with urbanization As the economic function drops away as a binding force, the affective function receives more emphasis Marriage becomes more specifically a matter of personal and emotional relations Economically useful marriages arranged by parents are replaced by marriages based on mutual attraction and personal choice The child, who no longer lives in a small community where all relatives and neighbours assume some responsibility for his welfare and behaviour, needs more attention, affection and guidance from his parents, even as their function of training him for a vocation disappears Welfare workers, mental health experts and others concerned with family relations place great emphasis upon this need of the child

Urbanization as a transitional process frequently—though not always—involves a large number of collapsed marriages, temporary consensual unions, and broken homes This appears to be particularly true where there is an unstable migrant labour force, drifting back and forth between city and country Sometimes families are set up in both places, one of which will be eventually deserted

Without question, one of the most serious and tragic aspects of urbanization is the plight of children who are deserted by their parents or orphaned In the village the child under these circumstances will not be robbed of all affection and security—relatives will ordinarily protect and rear him But in the city, there may be no relatives, or none able or willing to take him in, so that he becomes a child of the streets at an early age

Even if one or both of the parents are at hand, however, the child may in effect be deserted if he is left alone daily while they work, or is forced to go out and find means of supporting himself Thus, the combination of outside employment of the mother and absence of kin or community to watch over the child represents one of the most seriously disruptive aspects of urbanization so far as the family is concerned

Parent-child relations may become strained because the basic role of the parents in rearing and "socializing" the child is rendered difficult—the parents themselves are not true members of the ... with its wa... bility of pr... fact, the ch... who quickly become knowing in the ways of the city through schools, contemporaries and other means, are often agents for adapting the parents and interpreting the city to them Situations of this type can easily mean a loss of respect for parents and a loss of parental authority, and can lead to friction within the family

Improvement in the status of women has been widely observed to follow from urbanization, partly because in the city the woman has the opportunity to achieve independence and support herself by a job Yet, as noted elsewhere in this chapter, such independence may also be associated with physically and socially inappropriate forms of labour and, in an over reaction against traditional status, it may create serious problems in connexion with marital stability and the raising of children The question of woman's exact status and role is a matter of continuous questioning and soul searching in urbanizing societies

The status and role of the husband and father also undergo change although this subject has received less attention On the one hand, economic responsibilities tend to be more concentrated upon him than in the rural area where he was only one of the contributors to the family economy, his role, like that of other members, being often rigidly determined by traditional patterns and customs At the same time, he may lose prestige and self respect if he is unable to keep a regular job or get increased pay as he grows older—a situation over which he may have little control [45] His status within the family is necessarily affected by the growing egalitarianism today in regard to the status of wife and children

Finally, the status of the elderly person undergoes change Whereas in the traditional rural society, elderly people usually maintain economic control ... or artisan industry) even ... the ...

... to be left ... support In countries without social security systems, old age assistance or similar measures, the aged person can easily become a derelict unless he has children who can provide for him or can return to the countryside

According to reports from several different regions elderly people, orphans, divorcees, unemployed relatives and various other categories of persons in need, as well ...

rural tradition of mutual aid and is valued in human ...

may impede the accumulation of savings and the establishment of an indigenous middle class [46]

[45] See the address by Professor Richard T ... [illegible]

... Social Science, Vol 305, May ...

It may also take on a quite different appearance in the city, where income is individually earned outside the [illegible]

In the less developed countries at present, a high proportion of the urban population is still in the early stages of transition from rural ways of life, and its quest for family structures that are suited both to urban conditions and to human needs for material and emotional satisfaction is hampered by the conditions described elsewhere in this chapter—conditions of extreme poverty, over-crowding, and lack of satisfactory means of livelihood

Nevertheless, the resilience of human beings in adapting themselves to new conditions should not be underestimated The urban populations are not made up of passive and uniform masses, but of millions of individuals facing new challenges and responding with all possible variations of success or failure [57]

### The transition to urban types of social organization

In the rural district, formal and informal types of social organization rest largely upon physical contiguity and are limited to the family or kinship group and to local community or neighbourhood organizations The residential parts of cities throughout the world include true neighbourhoods of people who interact in formal or informal patterns, but they also include localities with little if any neighbourhood structure, the residents having practically no social contacts with their next door neighbours At the same time, in well-established urban society, numerous forms of association will be found operating, based on common occupational interests (labour unions), recreational interests, religious interests, political interests, etc Informal group contacts with relatives and friends outside the immediate neighbourhood also have an important place

In cities of rapid growth and large migrant populations, tightly-knit neighbourhoods are the exception, and associations based upon common interests outside the neighbourhood are apt to be little developed among the newcomers

In spite of the instability of much of the urban population in the less developed countries, however, it appears that distinct neighbourhoods do tend to become established in many cases as the result of the ethnic, religious, tribal, or linguistic diversity found in the cities Such heterogeneity of the urban population with separate dwelling areas is particularly marked in Africa south of the Sahara and in southern Asia In some Asian cities, such as Djakarta, most of the population live in what are practically self-contained villages, maintaining the customs of their various places of origin, and aiding each other in house construction and in case of family emergencies "Deviant behaviour is not tolerated, and offenders are punished by ostracism or eventual banishment from the Kampung" [58] Although neighbourhoods in most cities of the less developed countries are less clearly defined, it is probable that even in the most amorphous shantytowns there is some clustering together of people from the the same village or tribe

Such neighbourhoods have considerable advantages from the standpoint of the welfare of the migrant individual or family They undoubtedly counteract *anomie* and demoralization Regional planners generally favour the systematic promotion of neighbourhood units in the cities for such purposes There are also disadvantages, [illegible]

tion of their rights, obligations and potentialities in relation to the city as a whole, and they may perpetuate group conflicts The serious riots between members of different tribes in African cities, and between different linguistic and religious groups in certain Asian cities, illustrate the danger The public housing policies of some municipalities in the industrialized countries at present are trying to break down the previous segregation of different groups Considerable study and a wide variety of different local solutions will be necessary to achieve the social advantages of cohesive neighbourhood organization in the cities while minimizing the dangers of segregation and group conflict

In Africa and parts of Asia, urban associations based on tribe, caste or place of origin have spontaneously developed and have an important influence in the assimilation and adjustment of migrants In other cases, as in Latin America, where urban associations are generally based on common occupational, recreational, or religious interests, it appears that organizational ties are strongest and most numerous in the well to do classes, fairly important among the regularly employed workers, and very weak or non existent among the recent migrants, who are too irregularly employed to belong to unions too poor to pay dues, and too unfamiliar with city types of recreation or city religious associations to seek our organizational connexions (Studies in the United States have also indicated that participation in organizations increases the higher the economic and educational level and the longer the residence in the city) As in the case of neighbourhood units, the means of fostering socially desirable organizational ties among the recent migrants will require further study and a wide variety of local solutions The possibilities of promoting voluntary organizations and assisting groups that develop spontaneously and provide growing points for social reorganization have been barely explored as means of helping migrant families in the cities of less developed countries in their adaptation to the urban environment

[57] For an extended discussion of needs for social services in connexion with changes in family functions see "Maintenance of Family Levels of Living Social Policy Relating to Social Insurance Social Assistance and Related Social Services" (United Nations, E/CN.5/321)

[58] H. J. Heeren [illegible] of Indonesia-

### Crime and delinquency in relation to urban growth

It has been widely observed that the rapid growth of urban society tends to be accompanied by a general increase in rates of crime and delinquency Some observers contend that the urban crime rate is characteristically higher than the rural rate because of the inherent differences between urban and rural society, and that the larger and more urban the locality, the higher the rate of crime An alternative and more defensible conclusion is that size or concentration of population alone does not necessarily have any direct causal relation to crime

[illegible]

other conditions that lead to increased crime [illegible] however, vary greatly in their characteristics and their crime rates, and so also do rural districts, some of which are notorious for feuds, banditry, smuggling and other illegal activities The whole subject of urban versus rural crime rates, moreover, is surrounded by such a host of statistical difficulties and difficulties of definition as to make highly tentative any conclusions based on available data (which do not themselves all point in the same direction)

In the United States, information compiled in *Uniform Crime Reports* shows that over-all crime rates in urban areas are much higher than those in rural areas, but it is interesting to note that the differences vary considerably according to the type of crime [59] For the more serious

[illegible]

rural rates

Clearly, the kinds of crime that individuals may commit will depend upon the kinds of circumstances in which they find themselves Thus rural residents may easily get into disputes that can lead to violence concerning landed property, while urban residents will more likely than rural residents to become involved in "economic crimes"—criminal infractions of laws governing financial and economic matters such as import and export permits and foreign currency Rape may occur with equal frequency in town and village, but prostitution is by its nature a more urban type of problem

While few conclusions can be drawn in regard to the question whether the city, as a mode of life, is inherently more conducive to crime in general than is the countryside, there appears little doubt that the process of rapid transition from the one form of society to the other often brings with it a sharp increase in crime There is apt to be in this process a phase of personal and social disorganization, prior to re-organization and assimilation to the urban mode of life The rural migrant is faced with new sets of values, conflicting with the old, and new goals and standards that are often unattainable for him A limited amount of evidence suggests that the greater the gap between the traditional rural and the urban mode of life, the greater the likelihood of crime and delinquency appearing as a by-product of transition [60] However, in view of the fact that migrant groups differ greatly in their social characteristics from each other as well as from the city dwellers, generalizations in this field must be approached with caution

*Juvenile delinquency*

Studies from a number of different regions have indicated that juvenile delinquency, in particular, tends to increase rapidly in the cities of countries that are undergoing economic and social change For example, a study in India has concluded that "juvenile crime in an acute form is confined to the cities",[61] and an analysis in territories administered by France has emphasized the close relation between accelerated urban growth since the end of the Second World War and the disturbing rise of juvenile delinquency [62]

Much of the increase in juvenile delinquency during urbanization is attributed to the decline of family influence and community control over youth Many youths drift to the towns without their parents (their departure may be itself an act of rebellion against established society), some go to the towns to seek their parents, who had earlier left them in the village Even in the absence of their parents, children in the village are strongly influenced and directed by the community itself, but the urban centre is apt to lack this cohesiveness and control [63] The stability of tradition and experience provided by the presence of old people is missing—the village youth in the city loses positive as well as negative influences of the traditional environment

Even youths who migrated with their parents or were born of migrant parents often do not receive adequate parental supervision and guidance, as mentioned above, and the younger generation, brought up in the city, may regard the older generation as backward and primitive and refuse to be guided by it In addition to such circumstances, the temporary and unstable marriages and liaisons [illegible] transitio[illegible] abandon [illegible]

The weakening of family, kinship and community ties is compensated for in the urban environment by the growth of "peer" groups at different age levels with their own codes of behaviour Such groups may fill

[59] United States Department of Justice, Federal Bureau of Investigation, *Uniform Crime Reports for the United States*, vol. XXV, No 2, 1954 (Washington, D C).

[60] [illegible]

[61] Government of India, Intelligence Bureau, *Criminality Resulting from Social Changes and Economic Development*, 1956 (mimeographed, 14 pp )

[62] P Aubin, "La Délinquance juvénile outre-mer", *Rééducation*, No 69, August September 1955

[63] Mme A. Hussein, "Egyptian Children in an Era of Awakening", *Journal of Educational Sociology*, vol 28, No 7, March 1955, pp 288-289

the social vacuum in legitimate and constructive ways, but in the conditions of urban slums they often operate as "gangs" that roam the streets, committing petty crimes, sometimes supporting themselves by predatory means, conducting warfare against other gangs and often serving as the tools of professional criminals

Whether in gangs or not, children and youths who do not attend school and cannot find fitting and steady employment are apt to take to the streets and fend for [illegible]

selling narcotics, operating in black markets, etc In a study dealing with juvenile delinquents and destitution in Poona, India, it was found that "more than 50 per cent of those who committed thefts [were] neither employed nor in school "[64] In some cases the situation is aggravated by legislation resulting in a hiatus between school leaving age (e g, 14 years) and the minimum age for juvenile employment (e g, 16 years) This problem has been noted in both Africa and Latin America[65]

Moreover, children are often recruited by criminals in the city or even imported for purposes of exploitation It has been reported that in Istanbul, for example, homeless youths are engaged to work in the black market by older established offenders Indeed, homeless youths coming from remote parts of Turkey form the main source for the recruitment of juvenile delinquents[66] Practices of this type illustrate the fact that the social problems of urbanization may be self perpetuating an urban class of people who live by crime recruit the unwary youth into their ranks and the latter in turn become members of the class

Parents themselves often promote juvenile delinquency by encouraging their children to engage in certain types of undesirable activity A case in point is begging, which may lead to delinquent behaviour and in certain countries is handled by the same courts and agencies

The tendency of rural youth to seek excitement in the city frequently ends in juvenile delinquency There is no doubt that urban ideas and influences now reaching into the countryside are causing widespread restlessness among the rural youth some of them are reported to migrate hundreds of miles in search of the excitement of the town and the prestige of urban life and employment[67]

[64] G N Ruttonsha *Juvenile Delinquency and Destitution in Poona* (Poona Deccan College Postgraduate and Research Institute 1947) p 64

[65] See E S Enochs "The Children of Latin America in an Age of Anxiety" *The Journal of Educational Sociology* vol 28 No 7 March 1955 pp 299 307 and E Hellmann "The Sociological Background to Urban African Juvenile Delinquency" *Penal Reform News* Newsletter No 29 July 1953 (issued by the Penal Reform League of South Africa) p 7

[66] "The Prevention and Treatment of Juvenile Delinquency in Turkey" prepared by a working group under the chairmanship of Professor Tahir Taner *Annales de la Faculté de Droit d Istanbul* 1ère année, No 1 1951 pp 1-42

[67] At a regional meeting, sponsored by UNESCO for leaders of youth movements held in Tokyo in 1953 the youths themselves declared "In rural areas it is essential to enrich a life which through its poverty of cultural resources and its monotony tends to drive young people away to the cities" (UNESCO/ED/138 1954 p 5)

*Prostitution*

In areas where the male migrants far outnumber the female migrants, as in most of Africa and Asia, the resulting imbalance in the urban population generally leads to extensive prostitution, as well as to various forms of sexual irregularity and abnormality Three additional factors besides population imbalance must, however, be considered first, the unstable, drifting character of the migrant labour force, which militates against a stable family life, second the fact that many young women leave their rural communities seeking independence and in protest against the traditional inferior status of women, which is associated with traditional marriage relations,[68] third, the severity of economic need The inability of women (including refugees) migrating to cities to find work paying adequate wages has been found in several recent studies in economically less developed countries to be an important cause of prostitution[69] Severe destitution, combined with other factors, can lead even married women to practise prostitution with the knowledge and complicity of their husbands It should also be mentioned that in certain rural societies, sexual mores are quite flexible, so that some of the practices mentioned above are not necessarily regarded as very serious

Data from several countries, including the Philippines and Burma, indicate that young women are often recruited from the rural areas for prostitution under the false guise of domestic work or the promise of marriage Moreover in some instances, rescue homes and other alleged social services for the rehabilitation of prostitutes are themselves the instruments for organized traffic in women Marriages are arranged by rescue homes and by affiliated marriage bureaux but this is only a subterfuge for continuing traffic, arrangements having been made for the girl to return to the home so that subsequent "marriages" can be contracted[70]

*Adult male workers*

Adult male workers, particularly migrants without family ties in the cities, are likely to devote much of their pay to prostitutes, as well as to gambling, drinking and related activities Such activities may prevent them from using their incomes to provide themselves with adequate food or housing and to support their families (whether these are in the city or in the migrant worker's place of origin), and may create health problems of alcoholism and venereal disease In a number of cities, excessive drinking among workers is a leading cause of absenteeism and low labour efficiency Furthermore, gambling, drinking, and patronage of prostitutes are

[68] "Together with prostitution in its varied forms beer selling is one of the main foundations of the new found economic independence of African women" (A W Southall *A Preliminary Report of Kisenyi Mango Kampala Uganda* (East African Institute of Social Research June 1954) (mimeographed) pp 44-45)

[69] See G R Banerjee [illegible] *Rehabilit*[illegible]

*Commission* 1955 (mimeographed in Burmese)

[70] Cf Banerjee op cit

likely to foster and support organized professional crime and also a wide range of illegal activities that can make a large part of the poorer classes of a city violators of the law, as in the case of illicit beer brewing in the South African cities

Apart from individual and organized or semi organized crime, it should be observed that the presence in a city of a large mass of unstable, underpaid and ill housed people presents a constant danger of mob violence There have recently been many alarming examples of the readiness of the men and youths of the cities in less developed regions to relieve the frustrations arising from poverty and poor adjustment to city life by explosions of mob violence The immediate causes may be political, economic, religious, or racial, but the results are often indiscriminate killings and destruction of property without much relevance to the original issue

Chapter VIII

# URBANIZATION IN AFRICA SOUTH OF THE SAHARA[1]

## INTRODUCTION

Urbanization in Africa south of the Sahara is, in general, of recent origin Urban centres have long existed in certain parts of the region, as in the Emirates of Northern Nigeria and in the Yoruba chiefdoms of western Nigeria, and to a less extent in places along the east coast, where Arab influence has been strong These old cities were, however, always few in number and even today are quite different from modern towns in their social and economic structure and culture patterns, lacking various characteristics usually associated with urban life[2] It was only with the advent of European traders and, much later, settlers, government officials and industrialists, that modern cities appeared in the region and, except for some cases in West and South Africa, their growth to significant magnitude did not start until the end of the nineteenth or the beginning of the twentieth century Following in the wake of accelerated economic development between the two World Wars, and more particularly since the beginning of the Second World War, the increased rate of growth of towns and the spread of urbanization have become major features of the changing situation in Africa[3]

Table 1 illustrates the rapid pace of urbanization in Africa south of the Sahara in recent years The growth of major cities has been paralleled by an equally rapid increase in the population of the smaller or newly created towns, such as Bamako, Bangui, Cotonou, Douala and [illegible]

Beira in Mozambique, to mention only a few on which recent data have been obtained A large number of small towns have also recently emerged either around mining districts as, for instance, in the Federation of Rhodesia and Nyasaland and the Belgian Congo, or in the centre of the prosperous cocoa and coffee growing districts, as in the Gold Coast, Nigeria and British East Africa Recent urban expansion may be attributed to a large extent to the increasingly intensive exploitation of mining resources and primary agricultural products, as a result of the demands of the Second World War and the post-war period, and to the subsequent expansion of public and private investments and of the corresponding secondary industries and administrative and other services

In many towns, the non-African urban population has considerably increased in recent years, as well as the African population At least 75 per cent of the 4 million Europeans and 70 per cent of the 700,000 Asians and Arabs living in Africa south of the Sahara are city-dwellers, however, except in the Union of South Africa, and in spite of rapid growth in their numbers, the non-Africans usually constitute only a minor percentage of the total population in the various cities

The rapid growth of cities should not be considered as meaning that Africa south of the Sahara is extensively urbanized as yet Only about 6 per cent (or about 10 million) of the total population of the area will be found living at any given time in cities of 20,000 or more inhabitants[4] Moreover, the urban population is very unevenly distributed geographically Thus, while nearly 30 per cent of the total population in the Union of South Africa and more than 40 per cent in Western Nigeria[5] live in towns of 20 000 inhabitants or more, in other parts of the area—for instance, in Ethiopia, Liberia and British East Africa—the urban population, measured by the same standards, is probably no more than 1 to 3 per cent of the total population Furthermore, there are as yet few really large cities (of 300,000 or more) in the whole region Thus, by and large, in Africa, " the present towns and cities still represent urban islands in a sea of rurality "[6]

## CAUSES OF MIGRATION TO CITIES

While, in general, the causes of migration to cities are similar to those found elsewhere, certain factors can be considered to have special importance in various parts

[1] Much of the material in this discussion of urbanization in [illegible]

[4] The total percentage of Africans who have lived in urban areas for certain periods of their lives is however considerably higher

[5] For the whole of Nigeria the percentage is only 7 5 per cent

[6] See K Davis and H Hertz Golden " Urbanization and the Development of Pre Industrial Areas ", *Economic Development and Cultural Change*, vol III No 1, October 1954 p 22

*Table I* [1]

POPULATION OF CITIES OF 100 000 OR MORE INHABITANTS IN AFRICA SOUTH OF THE SAHARA

| City | Population in thousands* (Round numbers) | | |
|---|---|---|---|
| | *Within decade preceding Second World War (1930-1940)* | *Within five-year period following Second World War (1946 1950)* | *Most recent census or estimate* |
| Luanda (Angola) | 51 (1930) | | 142 (1950) |
| Elizabethville (Belgian Congo) | | 62 (1947) | 103 (1950) |
| Leopoldville (Belgian Congo) | 36 (1938) | 119 (1947) | 301 (1954) |
| Addis Ababa (Ethiopia) | 300 (1938) (Est ) | | 400 (1951) (Est ) |
| Asmara (Eritrea) | 98 (1938) (Est ) | 131 (1948) (Est ) | |
| Brazzaville (French Equatorial Africa) | 20 (1933) | 83 (1950) | 105 (1951) |
| Abidjan (French West Africa) | 18 (1933) | 46 (1948) | 119 (1955) |
| Dakar (French West Africa) | 93 (1936) | 171 (1946) | 230 (1955) |
| Accra (Gold Coast) | 71 (1936) | 136 (1948) | |
| Nairobi (Kenya) | | 119 (1948) | 186 (1954) (Est ) |
| Tananarive (Madagascar) | 120 (1936) | 171 (1949) | 200 (1954) (Est ) |
| Lourenço-Marques (Mozambique) | 47 (1935) | 94 (1950) | 10[illegible] (1954) (Est ) |
| Kano (Nigeria) | 89 (1931) | | 130 (1952) |
| Ibadan (Nigeria) | 387 (1936) | | 459 (1952) |
| Ife (Ile Ife) (Nigeria) | 24 (1931) | | 111 (1952) |
| Iwo (Nigeria) | 57 (1931) | | 100 (1952) |
| Lagos (Nigeria) | 137 (1936) | 230 (1950) | 267 (1952) |
| Ogbomosho (Nigeria) | 87 (1931) | | 140 (1952) |
| Oshogbo (Nigeria) | 50 (1931) | | 123 (1952) |
| Salisbury (S Rhodesia) | | 69 (1946) | 119 (1951) |
| [illegible] | 23 (1931) | 69 (1948) | 100 (1952) (Est ) |
| [illegible] | 64 (1936) | 83 (1946) | 109 (1951) |
| [illegible] | 307 (1938) | 471 (1946) | 658 (1956) |
| [illegible] | 267 (1938) | 372 (1946) | 591 (1956) |
| [illegible] | 79 (1936) | 131 (1946) | 168 (1951) |
| [illegible] | 522 (1938) | 763 (1946) | 1,007 (1956) |
| [illegible] | 105 (1938) | 148 (1946) | 189 (1951) |
| [illegible] | 129 (1936) | 244 (1946) | 285 (1951) |
| [illegible] | 87 (1936) | 111 (1946) | 119 (1951) |

*Sources* *Demographic Yearbook 1952* and *1955* (United Nations publications, Sales Nos 1953 XIII 1 and 1955 XIII 6), official information supplied by the United Nations Statistical Office, [illegible] (London H M Stationery Office 1955), Union of South Africa *Official Yearbook, 1939* and *Monthly Bulletin of Statistics*, Vol XXXV, No 8, August 1956, and L Wuyts, "L'urbanisation de la cité indigène de Léopoldville", *L'Habitation* (Brussels), June-July 1955, pp 468 ff

* It should be noted that with the possible exception of the [illegible]

[illegible] pp [illegible]

of Africa [8] the desire or necessity to obtain money income for such purposes as the payment of taxes, the purchase of certain highly valued consumers' goods or implements, or the payment of a bride price, pressure of population on the land, which is not generally found in Africa in the form of a shortage of land area *per capita*,[9] but which, in many regions, results rather from a recurring threat of famine or crop failure (owing largely to inadequate equipment and faulty methods of utilization and cultivation of the land), the desire to break away from the monotony and strict controls of tribal life, the

[illegible] Rhodesia [illegible]

[8] See, for instance, L.-P Aujoulat, "L'Afrique noire à la recherche d'un équilibre", *Economie et Humanisme*, No 99, September-October 1956 p 391

[9] Except in the territories where [illegible]

attraction of the town and its real or imagined opportunities for personal advancement and independence, as well as improved material welfare, the desire to join one or more members of the family already in the town, the social prestige associated in certain tribes with a period of residence in town, and, finally, the pressure of labour recruiting agents, administrators and chiefs, which has been in the past, and still sometimes remains, an important factor in movement to cities There is also evidence that education affects the tendency toward migration an Ashanti survey, for example, revealed that 95 per cent of the boys who passed through primary school left the area to work for wages in mines and towns, and a Nyasaland survey has shown a direct relation between the class reached in school and migration to outside areas with higher wages [10]

It should be remembered in this connexion that the number of male Africans between the ages of fifteen and forty-five who leave their traditional environment and engage in cash employment in places other than cities, such as plantations, farms and railway camps, is also high [11] Such places of employment, and also the numerous small towns recently created or developed, are important, particularly in tropical Africa, as staging areas intermediate between the village and the large city

In some recent studies, an attempt has been made to weigh the relative importance of various causes of migration to cities Thus, Balandier, in relation to Brazzaville, has assessed the main causes as follows exclusively economic in about 25 per cent of the cases, exclusively due to a desire to rejoin a member of the family established in town, 25 per cent of the cases, a combination of the above two causes, 25 per cent, a desire to rise in the social scale (e g , to pursue study or acquire skill), 10 per cent, a desire to break away from the traditional environm nt, 10 per cent, and miscellaneous, 5 per cent [12]

## Main features of African urbanization

African cities tend to have certain characteristic features which are related to the historical, political and economic conditions that have affected the development of the region

(1) Many of the cities in Africa south of the Sahara were established in a colonial framework, for the use of non Africans, and were originally conceived as administrative, military and trading posts or mining centres which were not meant to include a large permanent African population In the early days (and, in some cases, still today, especially in certain parts of east and central Africa and of the Union of South Africa), the Africans were expected to come to the city only for short periods to take unskilled jobs in public works or in mines, they were expected to continue living in the nearby villages, or to live in temporary quarters and return to the rural areas as soon as the term fixed in their contract of employment was completed When a sizable African population came at a later date to live in the city, there was often considerable geographical and administrative separation between the European and the African parts of the municipality [13]

(2) With the exception of some cities in the Union of South Africa, the Rhodesias and the Belgian Congo, urbanization in Africa has not been accompanied so far by large scale industrialization The cities often remain trading centres for the exchange, storage or export of raw materials, with only a few secondary industries The growth of African cities has been based primarily on the development of trade with countries and territories outside Africa, rather than on the development of internal manufacture and trade This lack of industrialization has given rise to doubts as to the ability of some cities to support permanently their present population, let alone the large increases foreseen for the years to come [14]

(3) To the heterogeneity normally existing in all modern cities, the African cities add the problems created by a multi-racial society, sometimes composed of Asian and Arab elements (the latter being especially numerous in East Africa) besides Europeans and Africans In most of the coastal cities of West Africa traders of Arab (usually Syrian or Lebanese) origin, while constituting numerically small minorities, have traditionally exercised an important influence on commercial developments as intermediaries between the African producer and the large European firms In many towns, each group is widely separated from the others not only by racial, linguistic and religious differences, but also (and often even more so), by wide variations in economic and social status and education and cultural advancement The traditional occupational pattern in African cities is rapidly changing, especially in some parts of Western Africa, but may still be generally described as follows the Europeans are mostly senior government officials, in professional or technical employment, teachers, or in the managing, foreman or supervisor category, and, in some countries, in skilled jobs in industry or commerce, the Asians are mostly traders, professionals, and sometimes intermediate level government officials, the various people of mixed origin, known as coloured, mulattoes Creoles, etc , are employed mainly in government departments or in white-collar jobs in trade These three groups and, more recently, the "urbanized" Africans, known as "evolved" (*évolués*) or "assimilated", have

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[10] Margaret Read "The Contribution of Social Anthropologists to Educational Problems in Under-developed Territories", *Fundamental and Adult Education* (UNESCO April 1955) p 74

[11] See for instance *The Population of Tanganyika* Population Studies No 2 (United Nations publication, Sales No 1949.XIII 2), pp 38-39

[12] G Balandier *Sociologie des brazzavilles noires* (Paris Librairie Armand Colin, 1955) pp 40-43 E. Capelle stresses the role of economic motivation in rural urban migration associating the influx or departure of migrants with urban job opportunities *La cité indigène de Léopoldville* (Leopoldville Centre d Etudes Sociales Africaines, 1947) p 32 See also *The Population of Ruanda-Urundi* Population Studies No 15 (United Nations publication, Sales No 1953.XIII 4) p 20

[13] [illegible] on the r master s [illegible] ising) [illegible] Dyna [illegible] idem [illegible] 1 160

followed or adopted to varying extents the Western urban

There are also important ethnic, religious, and linguistic differences among members of various African tribes who come to live in urban areas, fifty or more different and in some cases traditionally antagonistic tribes are sometimes represented in a single city Even in smaller towns that are rapidly growing, a variety of languages and dialects may be found At the same time, in many cities of Africa, in spite of the general heterogeneity of the African population, there is often a powerful tribe which, for historical or geographical reasons, occupies a predominant position in a given area (e g, the Bakongo in Brazzaville, the Buganda in Kampala, and the Bemba in Lusaka) In some of the West African territories and, in particular, in small towns, members of tribes other than the dominant one live customarily in separate parts of the town known as "zongo", within a distinct administrative unit with its own chief and elders The problem of different languages and conflicting customs is sometimes partly solved or made easier by the practice whereby migrants from other tribes assume the customs, traditions and language of the predominant tribe—a practice that facilitates not only day-to-day life, but dealings with the African administration and courts In other cases, through tradition, convenience or West-

politan Power

(4) Because of the above-described circumstances and the recent large influx of African country-dwellers, if for no other reasons, the bulk of the African population has often had to settle or continue to live in the periphery of the city in accommodation showing various degrees of improvisation, ranging from what could best be described as "outgrown villages" to "shantytowns" or squalid encampments on the outskirts of the city or around mining, railway and other industrial undertakings Thus, "in the whole of Africa, what has been called the growth of new towns is first and foremost the conglomeration of uprooted human masses, who are camping in the expectation of remunerated labour, but who maintain ties, sometimes at a very long distance, with the native bush and for whom a true adaptation to urban life is not facilitated since it can be guaranteed only by adequate wages, lodging and security provisions" [16]

considered as permanently fixed in the cities.[17] The large—though now declining—proportion of floating population helps explain the prevailing instability and related difficulties encountered in the organization and development of African urban areas At the same time, the constant two-way movement between town and country, increasingly facilitated by the growth of transportation of various kinds, tends to multiply the number of Africans who have had a taste of urbanization and increases the influence of urban patterns and ways of life on the areas Urban influences thus operate as a powerful stimulant of social change in Africa

(6) Nevertheless, the gulf between the traditional culture of Africans in their own surroundings and the culture of modern cities remains wider and deeper than the rural urban gulf in any other major region of the world The problem of transition, as a social and psychological problem, is thus encountered in Africa in an extreme form In other economically under-developed regions, the process of transition is usually helped by the existence of certain cultural or religious elements that are common to both rural and urban life and that serve as stabilizing factors, providing some sense of continuity and identity in a changing situation There is, for example, continuity of religion in Asia and Latin America —the Buddhist, Christian, Hindu, Moslem or follower of other major religion commonly maintains his religious beliefs and practices while undergoing the process of urbanization In many parts of Africa, however, where traditional African religious beliefs and observances still tend to prevail, it is much more difficult for the migrant and his family to maintain such customary beliefs and observances in the urban setting and at the same time become "modernized", although there are strong tendencies for traditional religions to persevere Remarkable combinations of witchcraft and modern medicine can also be observed In other respects, also, it is difficult for the African to merge and fuse traditional and modern elements and produce a coherent new culture from this fusion Urbanization for the African may imply, for example, a radical change in forms of political organization and family life and in juridical institutions, as well as in material and economic aspects of culture The contradictions and conflicts he faces are often aggravated by difficult problems of race relations, which may be present to some extent also in the rural areas but are exacerbated in the cities

The above observations point to major problems of urbanization encountered in Africa south of the Sahara, many of which arise from the very rapidity and magnitude of the transition process The difficulties should

[16] Pierre Naville "Données statistiques sur la structure de la main-d'œuvre salariée et de l'industrie en Afrique noire", *Le travail en Afrique noire*, Présence africaine, No 13 (Paris, Aux Editions du Seuil, 1952), p 289

[17] Except for the Union of South Africa, the Rhodesias and some parts of British East Africa, this is true not only of the African population but also of a large part of the European population, while, on the contrary, persons of Asian or Arab origin generally constitute a permanently settled element of the town populat
in the
Indian
smaller
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*Townshi*

not be exaggerated, however, to the point where the essential plasticity of human nature is forgotten It must also be emphasized that considerable efforts have been made to deal with the problems in question, comparison with the previous situation or with existing rural conditions is strikingly favourable to the contemporary urban scene (the rural situation, however, is often improving rapidly as well) The number of permanently settled, reasonably well-paid, well-housed and [illegible] Africans is steadily growing There

[illegible]

Thus, for instance, the development of cities in West Africa, where the number of non African dwellers has generally remained small and where racial distinctions have never been so strongly marked, has been quite different from that of cities in other areas where, in the process of historical evolution, racial conflict has been accentuated In recent times, there has been a definite trend in all countries and territories concerned, with the exception of the Union of South Africa, to lower the [illegible]

[illegible]

and municipal administration have been undertaken The recent trend in legislation in the Union of South Africa, however, has been in the direction of increased racial separation

* * *

Africa south of the Sahara remains to a large extent an unknown continent, as far as statistical information is concerned, there have been few systematic urban studies, and great difficulties have often been encountered, especially in conducting censuses and in obtaining accurate information from sufficiently representative cross sections of the population [18] Furthermore, urbanization is such a new and rapidly changing phenomenon that information, once collected, may become obsolete before it goes to print Thus descriptions of particular urban areas in the most recent available studies may not only fail to represent conditions in other areas not yet studied, but they may also be no longer true of the areas to which they originally applied The following analysis of social conditions must therefore be regarded as tentative in so far as it implies general conclusions about urban conditions today in Africa south of the Sahara

### Urban development and housing conditions

The development of towns and urban areas in most of Africa south of the Sahara has followed a similar pattern [19] The first phase was that of the European creation of the towns, as mentioned above, the towns were intended originally for the habitation of a comparatively small number of Europeans, while provision for the housing of the African population was largely either of a temporary nature within the city limits or based on pre-existing villages on the periphery The typical early city in Africa consisted of an administrative centre, plus commercial districts and residential areas reserved in principle for non-Africans African districts of "locations" were often completely separated, even within the city limits, from such residential areas Municipal authorities usually consisted of official and non official European members appointed by the territorial authorities When industrial development took place, in particular around mining districts or railways, the employers were generally made legally responsible for the lodging of their African workers (mostly single men engaged on short term contracts) Legal separation of residence was and still is the rule in certain territories of central and southern Africa, where a special permit is generally required for an African to reside in a European district, although the laws are not always strictly enforced In the Union of South Africa, where segregation is more strictly implemented, Africans, with the exception of a limited number of domestic servants, are usually obliged to live far from the centre of the European cities In British East Africa, the towns are divided into zones determined on the basis of standards of building, thus there is no legal obstacle to prevent an African from putting up a dwelling in any part of an East African town, provided that the building conforms to the standard laid down for that area Legal segregation as such has rarely been applied in West African cities, or in cities elsewhere in territories under French or Portugese administration, but practical separation has existed and still exists in many instances [20]

With the large increases of urban population of all races, which took place mostly in the last quarter-century, the urban patterns were drastically modified Housing, water and electricity supply, garbage disposal and other facilities rapidly became inadequate, even in the westernized residential districts, since in many cases the European population itself greatly increased, particularly after the beginning of the Second World War Measures of rational town planning were undertaken, generally with the assistance of planners from Europe At the same time, with the rise of an African middle class, some well to-do Africans acquired property or rented housing in the European residential districts of some cities, particularly in West Africa, conversely, in the same parts of

[18] For one of the most recent and comprehensive studies of [illegible]

[19] The major exceptions are to be found in the traditional African cities of West Africa and in the cities of the independent countries of Ethiopia and Liberia, where urban growth has been gradual and is still relatively limited and where racial and cultural conflicts have generally been less marked in these areas the development of towns has chiefly given rise to problems common to all cities of the world (such as slum clearance the provision of low-cost lodging for the workers and the expansion of municipal services water and sewerage systems and sanitation)

[20] See J L L Comhaire, "Urban Segregation and Racial Legislation in Africa", *American Sociological Review*, vol 15, No 3 (June 1950) pp 392 397

Africa, a certain number of poorer European and Asian newcomers established themselves in predominantly African districts During this general stage of expansion, however, many dwellings built and owned by Africans on municipal lands, where temporary occupancy rights had been given, were removed in the process of redevelopment. In other cases, the attempt to enforce the observance of building standards also resulted in practice in the removal of African dwellings and the subsequent eviction of the many Africans who were not able to conform to these standards, other accommodation was not commonly provided This resulted either in extreme over-crowding of the poorer districts within the city or, more often, in the expansion of the African township locations, peripheral centres or suburbs In the absence of adequate planning in these suburban areas and of even elementary sanitation facilities, the situation there often got completely out of hand Many municipalities were neither desirous nor financially capable of expanding their limits in order to take over the direct administration of the suburban areas These were often left in the care of district administrations or of traditional authorities that were, as a rule, ill-equipped to deal with such problems, lacking the necessary staff, resources and experience [21]

In recent years, further political, commercial and

practical efforts to improve existing conditions and, in particular, their efforts to supply the average African city dweller and his family with adequate housing and

permit the financing and maintenance of modern housing and corresponding facilities [22] Urban Africans have been and still often are regarded, especially in central and south Africa, not as full-fledged members of the urban communities, but as wards for whose needs employers, municipalities or central governments should provide

There have been considerable recent changes in the

elected by a municipal council composed exclusively of councillors elected b

electoral colleges

in the Gold Coast,

consist of ex-officio members, elected members and unofficial nominated members Where town councils—which are not always popular with Africans, who may prefer traditional systems of authority—have been established, real control over municipal services may remain in the hands of European officials working under the nominal authority of the council [23] In some territories, there exist special African urban (or suburban) communities, such as the "centres extra-coutumiers" and the "cités indigènes" in the Belgian Congo [24] These "centres" and "cites" exist side by side with "European" cities (such as Elizabethville, Stanleyville, etc) Each centre is, in principle, administered by an African chief, deputy chief and an advisory council of five to twelve members appointed by the District Commissioner All matters of local interest come under their jurisdiction, and they are empowered to issue by-laws and levy taxes and fees The centre is placed under the direct trusteeship of the Governor of the colony, represented by a commissioner, and a "protector committee" of six members in charge of supervising the administration of the centre [25] The African "townships" established beside, but geographically separated from, corresponding European townships in certain parts of Northern Rhodesia, and administered by African management boards with the advice of European township officials, provide another example of separately organized urban African communities These separate townships have powers and institutions identical with those of the European towns, although special regulations may be applied In Southern Rhodesia, likewise, separate, self-contained African townships have been created and are administered by Africans A reported difficulty of the system of equal but separate municipal

as an urban community — it is possibly for this reason, among others, that in some multi-racial cities (in British East Africa, in particular) efforts have recently been made to organize mixed municipal councils in which equal (but not proportional) representation is given to Africans, Asians and Europeans

In many instances, there is overlapping of jurisdiction and practical administration between municipal and

pal authorities are often called upon, if only in an

[21] See, for instance, *East Africa Royal Commission 1953 1955 Report*, p 236 For an illustrative example of a typical East African suburban administration and the difficulties encountered, see Sofer and Sofer, op cit. pp 27-35

[23] J L. L. Comhaire, *Aspects of Urban Administration in Tropical and Southern Africa* Communications from the School of African Studies (University of Capetown, July 1953), p 15 (mimeo)

[24] According to existing legislation, the *centres extra-coutumiers* which have reached a certain numerical and administrative importance

[25] Comhaire, *Aspects of Urban Administration in Tropical and Southern Africa*, p. 24

advisory capacity, to deal with some of the problems of suburban areas [27]

The development of municipal self government has been accompanied by an expansion of the financial resources and assistance supplied by territorial, central or metropolitan governments for the improvement of housing and related services, African low-cost housing construction has become an increasingly important item in the expenditures incurred under the various develop ment plans in many territories Nevertheless, the living conditions of the majority of the African population are still patently inadequate The following types of African dwellings are now commonly found in urban areas

(1) Housing of the *camp, compound or barracks type*, consisting largely of dormitories built for transient or temporary single workers More recently, such camps (still often found, particularly in mining districts) have been replaced by or supplemented with quarters for

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dispensaries, sportsgrounds, general stores, etc They are built and owned by the public services concerned or the private employers, or rented by the latter from the local authorities, in some of these compounds, employers are still responsible for the control of their workers' beha viour outside working hours The lodging is supplied to the workers free of charge or for a nominal amount deducted from their wages

In a large number of dependent territories, as well as in the Union of South Africa, employers, including governments and municipalities, have been legally obligated to provide rent free

to return there daily Such accommodation was origin ally, for the most part, of the barracks or compound type in the case of large undertakings, although other types have been more often provided in recent years The provision, however, tends to be observed nowadays in practice chiefly by the public services and the large private companies or employers, especially mining com panies, cash allowances or wage supplements in lieu of rent are

ized and applied In

has shown that while

icans in public service

employment were housed by their employers, only 57 per cent in *manufacturing*, 26 per cent in commerce and banking, and 15 per cent in transport were so housed [28]

(2) For various economic and social reasons, the public authorities have considered it indispensable in recent years to assume greater responsibility for directly providing or supplementing workers' housing, as a general public function [29] In many cities, *large housing estates* have been developed, in which low-cost housing units are provided by the municipal or other government al authorities concerned They are generally built on plots where food can be produced (in order to facilitate family living by supplementing wages) An example of this system is found in the copper-mining African town ship of Broken Hill, Northern Rhodesia, where, out of a total African population of 15,000 at the time of the survey, 6,670 lived on five acre plots, on which were built two, three or more huts, each housing in principle a single family [30] Almost all Africans employed within the city limits of Nairobi, Kenya, also live on similar estates, some of which were recently built, with modern lodgings and facilities These estates have often been planned as neighbourhood units, with provisions for schools, health centres, shops, recreational and other amenities, and sometimes security and welfare services Units of this kind have been built recently in many territories, such as the Gold Coast, the Belgian Congo [31] and Kenya

(3) In other cases, an important part of the urban housing has been built with locally available material by the African users themselves on plots made available to them by the municipal authorities In the Belgian Congo, the African urban areas known as "cites indi gènes" or 'centres extra-coutumiers" (see above) have often been built according to *the plot system* In Leopoldville, for instance, the "cité indigène' is divided into plots of about 500m², each containing in principle a hut and a cultivable yard [32] Originally, each family was to be provided with one plot, but, owing to the enormous increase of population, there were, as early as 1947, eight or more families living on each plot Gener ally, the first occupant to whom the plot is allocated hastens to build some huts in addition to the one needed by his own family and leases or sells them to those who come after him, sometimes at exorbitant prices In many cases, considerable variations in the occupancy of plots have been noted, thus, in the Poto Poto African suburb of Brazzaville, it was estimated that the popula tion of a plot of between 300 m² and 350m² reached as many as twenty-two inhabitants, 45 per cent of the plots having between six and eleven persons, and nearly 25 per

[27] This overlapping or intermingling of administrations is par ticularly marked in some cities of East Africa as in Jin where

[28] East Africa High Commission, Statistical Department, *Reported Employment and Wages in Kenya 1954* October 1955 p 18 (For figures on Africans in each of these types of employ ment in Kenya, see Table 2 page 152 *infra*)

[29] See in this connexion *Special Study on Social Conditions in Non Self Governing Territories* (United Nations publication, Sales No 1953 VI B 2) pp 104 110

[30] G Wilson, "Economics of Detribalization in Northern Rhodesia", *and Urbaniza tion in Afric* on Broken H ment of the

or the

usive use of single families

[31] The Office des Cités Africaines, created in 1949 had built, by the end of 1955 more than 15 000 dwellings for Africans, particularly in Leopoldville, Elizabethville and Stanleyville

[32] See Capelle op cit, p 38

cent but a single occupant (man or woman)[33] In Tamatave, recent social and demographic surveys have shown that the density in individual plots in the workers' district has increased up to four times as compared to the density initially foreseen[34]

(4) *In a great many cases, however, the bulk of the African population* lives in closely-packed settlements that have grown up without any particular plan or system beyond perhaps the lay-out of streets and the provision of water These agglomerations have developed within the city or, more often, in suburban districts adjoining the original European centres, or in overgrown villages (some still semi rural, some almost completely urbanized) The Medina district on the outskirts of Dakar, considered the largest African agglomeration in French Africa, is an example of the suburban district settlement,[35] while many "rural" suburbs are found near mining cities in the Belgian Congo and cities in British East Africa

The *type of construction generally found in towns*, suburban areas or nearby villages varies from the traditional bamboo and palm frond hut or mud hut built by the dwellers on their own initiative—but often adapted according to the materials and customs found in the urban areas—to rammed-earth or burnt brick houses (generally built on a collective basis with some public assistance) and, to an increasing but still small extent, more durable constructions of brick or cement blocks, with corrugated iron or tile roofs In all types of African urban or suburban settlement, there is generally severe overcrowding, often aggravated by the lack or inadequacy of water and sanitation services[36] Even

ne water

actically

electric

lighting The situation is made worse by traditional compulsory hospitality and also by the emergence of a new African property-holding class, which, in spite of some measures *of control—more often than not ineffective*—is interested in getting as many tenants as possible

The various ecological patterns described often co-exist within or in the vicinity of the same city This is the case, for instance, in Elizabethville, where, in 1948, about 36,000 inhabitants lived in the "centre extra-coutumier", 18,000 in company camps, and 14,000 in

ing the city[37] In Durban

outbuildings, 29 in houses, and 3 in garages, and 10 had undefined lodgings[38]

While, *as pointed out, in many African cities low-cost* housing programmes have been put into operation in recent years, formidable obstacles are created by the rapid increase of urban population, the limited capacity of Africans to pay even minimum rentals, and the rising cost of land and building materials[39] The mobility of the average African worker also constitutes an obstacle to adequate planning Under these circumstances, it is sometimes considered that in spite of the low standard of accommodation put up by the tenants themselves on *plots in urban or suburban areas*, this "has often done much to alleviate the chronic housing shortage, providing cheap shelter for thousands of urban Africans who have none elsewhere "[40]

Likewise, it is believed by some observers that such accommodation on plots, with their opportunities for cultivation, however inadequate the housing facilities and services, is preferable to overcrowding in urban apartments One partial solution of the problem of *African housing has thus been in the direction of allowing the Africans to build their homes according to their* own customs and means, but with varying degrees of *advice, assistance and supervision from the administrative* authorities Recent measures to improve the housing *situation have included not only measures to* supply directly low-cost dwellings through public or

methods[41] For this latter purpose, free or special low priced building materials have been supplied in many cities *In some cases Africans are encouraged* to purchase construction material (bricks, for instance) piece-

local authorities

The adoption of aided self-help methods in urban areas, however, raises special problems, such as the difficulty of achieving even minimum standards, the lack of

[33] See Balandier, op cit, pp 58-59

[34] "Tamatave Ville Moderne", *Chroniques d Outre-Mer*, No 23, March 1956 p 9

[35] See P George, *La Ville Le fait urbain à travers le monde* (Paris Presses Universitaires de France, 1952), pp 316-317

[36] The three classical types of overcrowding too many houses

Crown Agents for the Colonies, 1950), pp  and 
*Royal Commission 1953 1955 Report*, pp 210-211

[37] See Grévisse, *op cit*, p 290

[38] See University of Natal, Department of Economics, "The African Factory Worker (Dunlop Factory, Durban)", *Social Implications of Industrialization and Urbanization in Africa South of the Sahara*, p 203

[39] See *Speciel Study on Social Conditions in Non Self Governing Territories*, pp 99-100

[40] See A. Southall, *A Preliminary Report of Kisenyi Mango Kampala* (Kampala, Uganda, East African Institute of Social Research, June 1954) p 20

[41] See International Labour Office, *Economic and Social* *of Workers' Housing in Non Metropolitan Territories (* *Reference to Responsibilities for Its Provision)*, CN
43 55

sufficient spare time, administrative difficulties (especially for large scale schemes), and the desire on the part of many regular workers for better housing than they can attain by their own labour [42]

URBAN LABOUR CONDITIONS

In some parts of Africa (e g , Union of South Africa, Kenya, the Rhodesias, and, to a less extent, the Belgian Congo and French Equatorial Africa), employment in industry, trade or public administration and public works constitutes the most important source of cash, in other cases, agricultural production for marketing is the main source of money earnings (as in French and British West Africa, Tanganyika and Uganda), although urban wage-earning still constitutes an important source of cash [43] Table 2 indicates the distribution of non-agricultural labour in Africa, which is largely urban labour

On the basis of table 2 and the latest available figures wage-earners or salaried employees in urbanized areas at the end of 1953 [44] Of these, nearly 40 per cent were in the Union of South Africa and another 20 per cent in the Belgian Congo, the most highly industrialized parts of the region Apart from these two countries and the Rhodesias, the proportion of urban wage-earners to the total adult population was still very small, although the number of African workers engaged at one time or another in urban employment would be much larger (possibly 50 per cent or more of the adult male population in some areas) In all cases, except that of the Union of South Africa, where over 600,000 African and Asian female workers were recorded in 1946, the overwhelming majority of regular workers were adult males between the ages of fifteen and sixty In some cities elsewhere, the introduction of sizable numbers of African women as factory workers is reported to be changing this picture It has been also reported, however, that this development has met with considerable African opposition

While the number of African traders in urban areas is still small, it has been increasing rapidly in recent years,

[42] See *Special Study on Social Conditions in Non Self Governing Territories*, p 102

[43] See *Enlargement of the Exchange Economy in Tropical Africa* (United Nations publication, Sales No 1954 II C 4), pp 1 7

[44] See *Information from Non-Self Governing Territories Summary and Analysis of Information transmitted under Article 73 e of the Charter Central African Territories, East African Territories West African Territories*, United Nations, A/3109, A/3110 and A/3113, respectively

*Table 2*

DISTRIBUTION OF AFRICAN WAGE EARNERS BY PRINCIPAL OCCUPATION

| *Territory and year of reference* | *Extractive industries* | *Manufacturing* | *Building and construction* | *Transport* | *Commerce* | *Domestic and other services* | *Public administration* | *Total* |
|---|---|---|---|---|---|---|---|---|
| French West Africa, 1954 | 12,419 | 30,779 | 42,670 | 33,134 | 51,210 • | 21,123 • | 107,626 | 298,961 |
| French Equatorial Africa, 1953 | 20,333 | 12,188 | 22,089 | 14,292 | 12,626 | 15,329 • | 16,800 | 113 657 |
| Sierra Leone, 1954 | 4,901 | — | 10,963 | 5,004 | 4,962 | 2 688 • | 11,162 | 39 680 |
| Gold Coast, 1952 | 41,037 | 11,776 | 44 700 | 18,511 | 23,498 | 18,328 | 33,352 | 191,202 • |
| Nigeria, 1952 | 57 688 | 17,923 | 35,392 | 42,335 | 20,579 | 13,129 | 53,181 | 240 227 • |
| Belgian Congo, 1954 | 103,518 | 167,312 | 128,915 | 84,468 | 77,399 | 318,741 | — | 880,353 |
| Angola, 1953 | 21,809 | — | — | — | — | — | — | 21,809 |
| Mozambique, 1953 | 5 025 | 29,866 | — | — | — | — | — | 34 891 |
| Madagascar, 1953 | 12,920 | 25,312 | 11 138 | 7 677 | 16,900 • | 36,997 • | 55,343 • | 166,287 |
| Southern Rhodesia, 1951 | 63 805 | 55,729 | 48,971 | 17 813 | — | 131,033 • | — | 317,351 • |
| Northern Rhodesia, 1953 | 46,100 | 18,650 | 25 500 | 8,150 | 6,810 | 73,820 • | 37,450 | 216 480 • |
| Nyasaland, 1953 | — | 1,400 | 4,300 | 5,800 | 1,800 | 3,200 | 19,100 | 35,600 • |
| Uganda, 1954 | 7,922 | 24,414 | 45,448 | 7,625 | 6,245 | 28,486 | 48,408 | 168,548 • |
| Tanganyika, 1954 | 15,453 | 19 669 | 16 373 | 24,262 | 11,428 | 50,946 • | 76 334 | 214 465 • |
| Kenya, 1954 | 5 448 | 42,754 | 19,411 | 34 355 | 22,080 | 44,274 | 103,709 | 272,031 • |
| Union of South Africa • | 491,900 | 436 029 • | 107,593 • | 98,367 • | 109,600 • | 830,900 • | — | 2,074,389 |
| TOTAL | 910,278 | 893,801 | 563,463 | 401,793 | 365,137 | 1,588,994 | 562,465 | 5,285,931 |

*Sources* For all countries with the exception of the Union of

• Including bank employees and professional workers
• Including 20 446 domestic workers
• Including 14,520 domestic workers
• Seafarers and dockers only
• Including women, minors and migrants from other territories.
• Domestic workers only
• Including 5,602 railway and dockworkers
• Including 66,857 domestic workers
• Including 35,700 domestic workers
• Including 30 000 domestic workers
• Includes African, Asian and coloured workers
• Provisional figure April 1956
• Provisional figure 1953
• 1946

especially where separate African townships exist, in many of which a monopoly in most petty and medium-sized trading enterprises and marketing is in practice reserved for Africans Lack of capital, education and experience in modern trading operations and of such elementary commercial skills as book-keeping and buying, combined with the general lack of resources of the average customer, have often handicapped the development of such trading establishments, especially when they have to compete with Asian traders who are longer established and more experienced[45] Asian traders also do not encounter the same difficulties in accumulating the necessary capital for business enterprises as do Africans, who are under strong and persistent pressure to distribute any savings among impoverished relatives living nearby or within visiting distance Many of the African traders are food distributors acting as intermediaries between the rural areas and the town market, or selling produce from their own plots In some parts of East Africa, in particular, African shopkeepers are still often kept out of the built-up sections of the town by the presence of Asian or other non-African storekeepers and the insistence on minimum standards for shops The African trade economy is thus still often a marginal economy[46]

While in many cities there are growing numbers of stabilized African workers and families, the majority of the African labour force in most of the urban areas is still composed of unskilled and unstable migrant workers Many of the migrants cross national or territorial boundaries for work[47] With the instability and lack of skill of the migrant African labour force go low wages and low productivity

*The migrant labour system and labour instability*

In the past, African labour was found in the villages on the spot, or in the vicinity of the newly-established towns or undertakings With the development of administrative, industrial and commercial activities, the demand for African labour greatly increased, and with it the necessity to recruit further and further afield The Africans, however, were often reluctant to work for European enterprises, in particular at long distances from their traditional surroundings Varying measures of direct or indirect compulsion were employed, ranging from outright forced labour (now officially abolished almost everywhere, as are penal sanctions for breach of labour contract), to the requirement of labour as a condition of residence in urban areas, or simply the obligation to pay taxes in money Whatever the means of recruiting, it was considered advisable to engage Africans on a short-term basis (generally three months to a year) and to repatriate them on the expiration of their contract, this policy not only facilitated recruitment, but also simplified the problem of providing quarters (for single men rather than families) and kept wages low Furthermore, the then prevailing idea according to which the average African would never be capable of sustained regular work so different in type and rhythm from traditional African labour, nor of highly-skilled operations, led many employers to prefer quantity to quality when recruiting There was, therefore, much waste of labour and little attention was paid to the physical conditions, training and supervision of African workers

While recent economic, social and political developments have all contributed to alter radically many of these conceptions, the numbers of migrant workers in Africa have continued to increase considerably in absolute terms, though not as a proportion of the total labour ... data permit no accurate ...

still prevails in most African cities Mobility of labour is not confined only to the continuous two-way flow between the countryside and the towns, but occupational mobility within or between different kinds of urban employment is also prevalent As a result, the turnover in many enterprises is very high and estimated at between 30 per cent and 100 per cent yearly or over[48] The continued abnormal mobility of labour in Africa is generally attributed to one or a combination of the following factors

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have recently been taking various measures to assist and encourage the establishment and development of African trade (For an example of recently envisaged measures of this kind, see Uganda Protectorate, *The Advancement of Africans in Trade* (Kampala, Uganda, March 1955))

[46] P C W Gutkind, *A Preliminary Report of Mulago, Kampala, Uganda* (Kampala, East African Institute of Social Research, 1954), p 61 (mimeo)

... 50 per cent of the mine workers ...

[48] ... two recent studies of urban factories have shown ...

(1) the fact already mentioned that, for many Africans, migration to town for work is often due only to temporary economic necessity or to the desire to earn cash for a predetermined purpose (such as the payment of taxes, the purchase of certain goods, or marriage payment), once this purpose has been fulfilled, the worker considers it natural to return to his place of origin,

(2) maintenance by the workers of regular contacts with their tribal areas, where their wives and families in many cases have continued to live and in which they wish in any case, to retain a stake, since they consider tribal lands as an essential safeguard, and usually intend to settle in them again upon completion of their contract or upon retirement,

[illegible]

accommodation and facilities, the existence of discriminatory measures, either legal or practical, standing in the way of personal advancement, and the lack of security against unemployment, disease and the exigencies of old age

The following quotation from a recent study of conditions in East Africa probably applies also to many cities in other parts of Africa

" the migrant labour system appears to be the only one through which a considerable section of the African population can meet its needs, because the economic opportunities for more effective specialization have either been absent or have been seriously circumscribed by legal and customary restrictions For many Africans it is not now possible to attain to a higher income level for the support of their families without working both on the land and in urban employment [Thus, this system] appears as the most economic choice which the African can make, however socially deleterious or otherwise undesirable it may be "[49]

*Lack of skill*

The mobility of African labour is a serious obstacle to the development of skills, since workers rarely stay long enough on a job to acquire experience and qualifications in a given type of work, and employers hesitate to incur the costs of training In almost all cities, there is an increasingly serious shortage of semi skilled, as well as skilled, African labour[50]

The average African's lack of education makes training difficult There is, moreover, a serious lack of training facilities both in schools and on the job In spite of an increase in recent years in the number of technical and trade schools and an improvement of curricula, vocational training has often not kept pace with industrial development either in quantity or in quality Adequate systematic schemes of training generally exist only in government and government aided schools, while well-organized apprenticeship systems are found only in a few large industrial undertakings[51] Furthermore, economic necessity and the desire to earn higher wages often result in a breaking of apprenticeship contracts by the worker in order to engage in semi-skilled employment at the earliest opportunity Lack of conviction or interest on the part of non-African managerial staff, particularly at the intermediate and foreman levels, adds to the difficulties, as does lack of incentive on the part of the African worker himself to make the efforts required to gain skills, when faced by discriminatory measures or by the competition of non-African skilled workers who are better trained and paid and who may offer powerful resistance to African promotion

The proportion of unskilled labour (including domestic servants) to the total urban working population has been variously estimated, usually between 45 per cent and 70 per cent In general, it is considered that the highest proportion of unskilled workers is found in comparatively new cities, since lack of skill, like other [illegible]

and 60 per cent in the newly-developed town of Cotonou in French West Africa, but at only 35 per cent to 50 per cent in older towns, like Dakar, Stanleyville, Lagos and Accra

Estimates of skilled labour may be deceptive because of the tendency to classify as skilled workers persons who are really only semi skilled, in order to give them added incentive in the absence of a sufficient number of fully-qualified workers, also the tendency to classify traditional craftsmen and independent traders as skilled or semi-skilled workers There are now in all African cities (in public and private employment alike) increasing numbers of fully trained African workers able to compete successfully up to the foreman level, and in some cases, the managerial level, with the non-African workers in similar categories, employed in public services, trade and industry, but their proportion to the total labour force is still quite small

*Wages and working conditions*

In many parts of Africa minimum statutory wages have been established by legislation enacted mostly since 1945, the basic minimum wages generally refer to single male unskilled workers[52] Labour legislation covering

[49] *East Africa Royal Commission 1953 1955 Report* p 154

[50] It should be pointed out in this connexion that the numbers of African semi-skilled and skilled workers have increased everywhere but that the shortage has nevertheless become more acute in relation to increasing needs.

[51] A certain number of new schemes have been recently instituted such as trai[illegible] the cities of [illegible] schemes (for[illegible] applied main[illegible] results of these experiments cannot yet be estimated

[52] In Kenya, for instance it was stated in a recent study that [illegible] to comparatively [illegible] id, "Wage Fixing [illegible] ions in Collective [illegible] *Institute Bulletin* No 6 11 November 1955 p 28) For details on wage systems and policies in the dependent territories in Africa see International Labour Office *Wage Systems and Policies in Non Metropolitan Territories*, CNT/4/II (Geneva, 1955), pp 9 28

conditions other than wages (such as working hours, paid holidays, safety measures, and compensation for death or injury) has also recently been introduced or expanded in most of the territories to cover African labour. In nearly all countries and territories of the region, conditions of labour have improved recently Most provisions only apply, however, to fully or partly stabilized urban workers, since, in spite of extended measures for inspection, their enforcement is much more difficult in the case of migrant labour

While wages have markedly increased in recent years, it is not considered that they have always kept pace with the rise in the cost of living, and even where there has been an increase in real wages, the salaries of unskilled and semi-skilled workers would still often appear barely sufficient even for the workers' own support, in relation to indispensable expenditures (such as food rent, light and fuel), let alone the support of a family [53]

There are extremely wide variations in the amount of wages and salaries paid, as between Africans and non-Africans, men and women, unskilled and skilled workers,[54] and as between manual workers in general and employees Even in the Copper Belt towns of Northern Rhodesia, where conditions of employment of African workers have markedly improved recently, the African underground worker receives, besides free rations and housing, a monthly wage of from $14 70, for a labourer, to $87 for a highly-skilled worker, while the salaries of white underground workers range from $7 to $10 72 per eight-hour shift (the white worker has to pay rent, which is reportedly low, and buy food) [55] Likewise, in the Union of South Africa, where Africans' real wages are considered to be above average as compared with those in many of the countries and territories south of the [illegible] men amount- [illegible] with £450 in [illegible]

The average salary of a skilled African worker tends to be between two and five times that of an unskilled worker, while salaried African employees even in the junior grades often earn, in some territories, at least twice as much as a skilled worker Sometimes there are also considerable differences between salaries paid in public and private employment, government officials at all levels (African) receiving higher salaries than those paid by private enterprise This derives partly from a tendency in some territories to adjust the salaries of African public servants towards equality with those paid to non-African officials It should be pointed out, however, that some private enterprises are also moving in this direction In most cases, men's wages are known to be considerably higher than women's, but this may often be due not to any deliberate discriminatory practices, but to the fact that the field for employment of women is much narrower than for men and also that a large number of the women, in particular those engaged in various types of services, are part time workers A recent study has shown, for instance, that in a family location of Durban, while the median earnings of men were between £10 and £12 10 0 per month, those of the women varied from £5 to £7 10 0, with 28 5 per cent of the men, but only 5 4 per cent of the women earning more than £15 per month [57]

[illegible]

income As long as wives and children remain in the rural area, they often constitute an asset, while in the urban area they can become a heavy financial liability Furthermore, in many instances, "to have a wife in town means to forgo a farm in the country" [58] The majority of African families resident in urban areas therefore have to find means to supplement the insufficient wages earned by the breadwinner [59] Cultivation of a plot of land as mentioned above, is an important and widespread source of additional income, open to town workers who own or can rent a piece of land near their [illegible]

working families [illegible]

The earnings of other members of the family are also an important source of additional income While, as already pointed out, regular employment of women in urban areas is still limited, except in the Union of South Africa, an increasing number engage in domestic service or in temporary or irregular employment, generally petty trade, laundering, cooking for single men workers, and sometimes also illegal occupations, a classical example of which is beer brewing, a very widespread occupation in most cities of Central and Southern Africa

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[57] University of Natal, Institute for Social Research, *The Baumanville Community, A Study of the Family Life of Urban Africans* (Durban, 1955) p 116

[58] Elkan, op cit., p 47

[59] See Pons *et al.*, op cit., p 296

[60] See, for instance, Uganda Protectorate, East African Statistical Department, *The Pattern of Income, Expenditure and Consumption of African Unskilled Labourers in Kampala, September 1952* (Kampala, May 1953), p 7.

Prostitution, encouraged by the presence of large numbers of single young men, is also widespread, even among married women Work by young children appears to be quite common For instance, one study found that many of the boys of school age in Leopoldville were forced by their parents to work during school hours, or at least after school [61] Likewise, it is reported that in some cities of the Union of South Africa, children of school age are often forced by economic necessity to work, while others do various odd jobs outside school hours, such as collecting and delivering laundry, taking care of younger children, etc

Even with these and other sources of additional income (including letting of huts or rooms), levels of living remain very low [62] Indebtedness is frequent and is often considered normal The material levels of living of better paid urban workers are adversely affected moreover, by traditional family and tribal obligations which are met with in all African cities in varying forms and degrees, these obligations include hospitality expected by, and rarely refused to, country relatives or fellow-tribesmen coming to town on a visit or to seek employment, the provision of board and lodging for children sent by relatives to acquire an education or skills, the feeding and sometimes also the lodging of unemployed relatives for extended periods, and the sending of gifts in cash and kind to chiefs or family members in rural areas Thus, the earnings of the worker are often used not only for himself and the needs of his conjugal family, but also to assist members of larger groups or units who may feel that they have a right to any resources of the household [63] This situation has led certain territorial governments to consider that salaries should be related to the customary obligations of the workers, rather than to their needs only [64] While the traditional extension of hospitality and mutual assistance is reported to have an adverse effect upon the material level of living of the urban African workers, and upon their chances for savings and self advancement, it should also be emphasized that it plays an important part in the African's way of life—according to the Africans' own estimates—and has been described as "an inherent fact of the African moral order" [65] Furthermore, the social and psychological value of such practices doubtless remains very great to Africans undergoing rapid transition in an urban setting that is in many ways alien to their traditional environment

While there is no fixed pattern to which all or most family budgets conform, by far the largest single item of expenditure is food (averaging from 50 per cent to 80 per cent of the total family budget), other major items tend to be (in order of descending importance) rent, light, fuel, clothing and transportation, although this order is by no means uniform, and clothing is sometimes next in importance to food [66] The few unskilled African workers who manage to accumulate some cash invest most of it either in clothes, which are considered an important symbol of success and civilized status, in certain durable goods, such as bicycles and sewing machines, or in expenditure connected with traditional ceremonies (marriages and funerals in particular) The practice of accumulating savings has been spreading among the African population in recent years, as evidenced by the growth of government sponsored savings institutions Indebtedness continues to be common among the workers in some of the larger towns, however According to a recent report, such indebtedness "is to a great extent the result of habit" [67]

There is generally little recorded evidence of wide spread unemployment proper This does not mean, however, that there is full employment even of the regular working population, since labour statistics and employment services are very often inadequate, or, in some territories, non existent as yet Furthermore, there are indications almost everywhere of disguised unemployment and of widespread under-employment and absenteeism, especially among unskilled workers A recent cause of under employment in many cities has been the slowing down of the building boom which almost everywhere followed the Second World War Many of the unskilled workers thus attracted to the towns were later unwilling to return to the rural areas

Another cause of unemployment among unskilled, and even among semi-skilled workers, is reported to be the competition in some cities (in French West Africa, the Rhodesias and the Union of South Africa in particular) with European workers, whose numbers sometimes considerably increased at the same time that the progress of general education and vocational training enabled Africans to have access to skilled employment [68]

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[61] [illegible]

[62] The extreme variety of add [illegible]

[63] See, for instance, C. Van der Plas, *Report of a Socio-Economic Survey of Bathurst and Kombo St Mary in the Gambia*, United Nations, TAA/GAM/1, p 132.

[64] See *Social Conditions in Non-Self-Governing Territories* . . pp 5-6.

[65] H Powdermaker, "Social Change through Imagery and Values of Teen-Age Africans in Northern Rhodesia", *American Anthropologist*, vol. 58, No 5 October 1956, p 809

[66] [illegible] 1953 [illegible] with [illegible] rke, [illegible] ican [illegible]

[67] United Kingdom, *Report by Her Majesty's Government in the United Kingdom of Great Britain and Northern Ireland to the General Assembly of the United Nations on the Trust Territory of Tanganyika under United Kingdom Administration for the Year 1955* (London, H M Stationery Office, 1956), p 95

[68] See for instance, P Mercier, "Aspect de la société africaine [illegible] ux et unités de [illegible] *les aspects socio-* [illegible] No 5 Centre [illegible] Institut Français d'Afrique Noire, 1954)

and unstable ... 's of country- ... , looking for ... y and tribal hospitality may in effect encourage unemployment or under-employment of members of the family or clan who are housed and fed by working members while they wait, sometimes unsuccessfully, to find employment. A factor serving to keep down the number of long term urban unemployed is their tendency to return to the rural areas as was the case, for instance, in Leopoldville during the depression of the 1930's, in Brazzaville, during the temporary slack in the building industry, the largest employer, and more recently, in Bathurst, from which more than 5 per cent of the population returned to rural areas during the relatively slack period 1951 to 1954.[70]

*Productivity*[71]

Labour mobility, lack of skill and low wages combine with other factors to prevent a rise in productivity without which, however, the African worker cannot permanently achieve a higher degree of economic and social development. The average output of unskilled African workers is extremely low in almost all undertakings. It has been estimated variously (according to the towns and undertakings considered) at between 25 per cent and 40 per cent of the average output of non-African workers in Africa. These figures, it must be realized, represent differences in output associated with the present wide differences in health, nutrition, education, cultural patterns and values, opportunities and rewards, etc. Comparative studies of potential or innate inability in regard to prod... because of the pr... circumstances, or... different circumst... duals of different groups are born. It can be said however, that recent studies have given no proof that the vocational aptitudes of the average African are biologically inferior to those of the average European, provided that other conditions are likewise comparable.[72]

Bad health, which saps energy and initiative and constant malnutrition, which similarly debilitates the individual, as well as the physiological consequence of widespread childhood malnutrition are considered by some observers to have a particularly adverse influence on the African's capacity for work. Other observers stress also the importance of psychological factors—the conflicts and insecurities of Africans in an urban environment, the preferences many of them maintain for traditional rewards and values, rather than for occupational success in a modern economy, their awareness of the obstacles that would tend to frustrate economic ambition, and, above all, their lack of education and training.

Experience has shown that financial incentives alone, while perhaps exercising an effect on immediate productivity, may also serve for many workers chiefly to shorten their period of employment in town, since increased wages enable them to save more quickly the sum of money which was their chief reason for accepting urban work, and thus to return sooner to their tribal area.

*Stabilization of labour*

It is now widely believed that stabilization in urban areas is "the essential prerequisite for the creation of an effective African labour force".[73] In the Belgian Congo, this policy has been systematically pursued for a number of years. In various other territories, such as Kenya ...

such a development are considered to include incentives in the form of higher wages, which would increase according to length of service and improvement of qualifications, holidays with full pay for continuous service of twelve months, better housing, measures of family support,[74] financial assistance for the establishment of newly wed couples, children's allowances, provision of more schools, hospitals, maternal and child welfare centres and recreational facilities. Systematic assistance to labour organization to improve bargaining power and promote a sense of belonging, and vocational training and guidance to improve job fitness and promotion opportunities of the workers, are likewise considered essential.

In establishments where measures of this type have been introduced, labour turnover is reported to have declined and productivity to have increased. Low labour turnover is reported in a factory in Kenya, for example, which has introduced a variety of measures, ...

[69] For a recent study of the pattern of intermittent industrial work, followed by work or rest in tribal areas, and the division of the Bantu labourer's time into wage-earning and non wage-earning periods, see *Tomlinson Report*, pp. 95-96.

[70] Derived from Van der Plas, op. cit., pp. 4 and 104.

[71] For a detailed recent study of this problem, see P. de Briey, "The Productivity of African Labour", *International Labour Review*, vol. LXXII, No. 2-3, August-September 1955, pp. 119-137.

[72] *Ibid.*, pp. 124-125.

[73] See *Report of the Committee on African Wages* (1954), para. 290, quoted in *East Africa Royal Commission 1953-1955 Report*, p. 148.

[74] Family allowances were recently introduced in territories under French administration and in the Belgian Congo. In ...

all production has doubled in the last six years and is now approximately 50 per cent of that of a factory of similar size in the United Kingdom Individual Africans have reached standards every bit as high as those of European workers The management confidently expects that, in a further six years' time, overall productivity will have reached 75 per cent of that in the United Kingdom "[75]

It should be mentioned that special services for women and for the improvement of their status in the family and in society are considered an essential part of any real stabilization programme, since the continuance of the low educational and cultural standards of women, still

### *Labour relations*[76]

On the whole, the majority of urban African workers still have very little bargaining power Only in rare instances (and even then, only temporarily) are there shortages as yet in the supply of unskilled labour Organization into trade unions, while in some cases authorized by law before the Second World War, only became significant after 1945 Even now, it is largely restricted to stabilized or partly-urbanized African workers Besides, in Africa, as in many other parts of the world, it is mainly among skilled workers that trade unions have been organized and have acquired bargaining power Table 3 shows the extent of recent growth of trade unions in numbers and membership in certain African territories The movement has been important chiefly in West African territories

In some territories, however, the activities of the trade unions are not based on the initiative of the workers themselves, but are strictly controlled or limited by the respective administrations In certain areas, occupational colour bars and the frequent opposition of white workers' unions to access by African workers to many higher-paid skilled jobs have also restricted the influence of African trade unions on the working and living conditions of the African workers [77] In some places, trade union organization, while fully encouraged by the administration, is still on a very small scale chiefly because industrialization and urbanization are so little advanced

Where trade unions proper are not yet very active, joint employer worker industrial councils or staff committees, generally under the control of the Departments or Services of Labour, have sometimes been created for the supervision of conditions of work, the organization

[75] See *East Africa Royal Commission 1953 1955 Report*, p 150

[76] For recent detailed information on industrial relations see *Information on* [illegible] *tories as furnished* [illegible] L.195 See also [illegible] *in Non-Metropolit* [illegible] 40, and 41

[77] This attitude seems to be changing in some cases It has [illegible] *World*, October 1955, p 9)

*Table 3*

DEVELOPMENT OF TRADE UNIONS IN SELECTED TERRITORIES, 1950-1954

| | Number of trade unions | | | | | Approximate membership | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1950 | 1951 | 1952 | 1953 | 1954 | 1950 | 1951 | 1952 | 1953 | 1954 |
| Belgian Congo | 49 | 50 | 59 | | | 5,175 | 6 092 | 7,067 | | |
| French Cameroons | 139 | 128 | | | | 20,350 | 20 355 | | 29,000 | |
| French Equatorial Africa | | 79 | 82 | 81 | | | | | 9,450 | |
| French West Africa | | 340 | 350 | 378 | | | 65,100 | 81,900 | 115,300 | |
| Gold Coast | | 57 | 97 | 104 | | 32,908 | 35,129 | 39,908 | | |
| Kenya | | 7 | 10 | 12 | 16 | | 11,365 | 27,572 | 32,502 | 41,989 |
| Madagascar | | 27 | 36 | 62 | | | 34,577 | 35,328 | 42,469 | |
| Nigeria | 140 | 144 | 124 | 131 | | 109,998 | 144,389 | 152,230 | 143,282 | |
| Northern Rhodesia | | 9 | 11 | 12 | 23 | | 40 000-50,000 | 47,000 | 40 000 | 50,000 |
| Sierra Leone | | | | | 11 | | | | | 19,862 |
| Tanganyika | | 1 (Asian) | 3 | 6 | | | | | | 960 |
| Togoland (French) | 37 | 46 | | | | | | | | |
| Uganda | | 2* | | 7 | | | 359 | 259 | 3,159 | |

[illegible] *maries and Analyses* [illegible] *General during 1954* [illegible] VI B 2), *Information* [illegible] *Territories as Furnished under Article 73 e,* [illegible] Nations, A/AC.35/L.195; *Official Records of the General Assembly Sixth Session, Supplement No 4,* [illegible] *in, Supplement* [illegible] *port of the* [illegible] *s,* A/2933, [illegible] *In Non Metropolitan Territories*, CNT/4/I (Geneva, 1955), pp 31 and 41.

* Plus fifty staff committees

of training centres and the arbitration of disputes Where these councils exist, there is generally in each territory one for the regular salaried workers and one for the manual daily-paid workers In the Belgian Congo, African workers' committees have been created in many important undertakings, but their practical activities have not been extensive so far [78]

In the traditional African cities and in cities with an important Moslem population (as in the French Sudan, Nigeria and East Africa), the ancient guilds which existed among craftsmen and artisans have held their ground, though adjusting in various ways to modern necessities While such traditional craftsmen generally constitute a very small minority of the African labour force, they are a stabilized element, and some of their members have proved to be capable of rapidly adapting to the new skills and to modern industrial operations and relations

### Health conditions

While statistics are few, it appears that the majority of Africans arriving in cities from the country suffer from infectious diseases, and often from several such diseases simultaneously Thus, a very large proportion of the workers arriving from their tribal areas in the towns of the Belgian Congo have been reported, as of a few years ago, to be suffering from more than one of the following diseases parasitic worms of the intestines, parasitic worms of the blood, malaria, incipient yaws, gonorrhoea, syphilis [79]

J C Carothers, in *The African Mind in Health and Disease* (Geneva, World Health Organization, 1953), remarks (page 33) "Normality in the African, even [illegible]

The African worker arriving in town is thus seriously handicapped by chronic ill health, which diminishes his physical resistance and his productive capacity

At the same time, the city environment into which the African comes to work and live may contribute to his ill health Thus, "overcrowded and insanitary conditions are a direct cause of ill-health, helping to spread tuberculosis and giving rise to such diseases as dysentery and malaria there is evidence that malnutrition exists among all but the richest sections of the African population of the towns" [81] Diseases which are believed to be much less common in rural areas, [illegible] pulmonary diseases, take [illegible]

times account for up to 25 per cent, and [illegible] of the death rate among the urban African population

as a whole) The unbalanced sex ratio existing in many urban areas is considered to be responsible for the high incidence of prostitution and the subsequent spread of venereal diseases The adverse influence of various [illegible]

On the other hand, offsetting this negative aspect of the picture, the towns in Africa offer better facilities and opportunities for both preventive and curative health treatment than can be had in the rural areas Thus, in view of the recent rapid development of health facilities, especially maternal and child welfare services in the city, infant mortality is expected to decrease more in cities [illegible]

areas) and, as a rule the most comprehensive services and the best qualified personnel, are found In recent years, urban hospital facilities have increased very con- [illegible]

to eradicate such mass diseases as malaria and yellow fever in particular, have originated and been most successfully carried out so far [illegible]

still prefer to obtain traditional medicine and consult medicine men and herbalists, especially when modern curative facilities do not yield immediate and obvious results.

### Environmental sanitation in towns

While, in general, urban sanitation in Africa has apparently made greater progress than rural sanitation, there are many exceptions, and in large cities that have grown at an abnormally rapid rate from villages or trade settlements, health conditions are often worse and more hazardous than in rural areas [83] The urbaniza- [illegible]

[78] See, for instance, Grévisse op cit., pp 130-132

[79] See P de Briey, op cit. p 126

[80] *Preliminary Report on the World Social Situation* (United [illegible] 1952 IV 11) p 25

[illegible] 53-1955 *Report*, p 208 [illegible] other areas.

[83] See Busia, op cit., pp 49-51.

[illegible]

[84] See Dr N D R Schaller, *Problems of [illegible] in Africa South of the Sahara* [illegible] Env.San./50, 12 May 1953

tion process itself creates many special sanitary problems In recent years, great efforts have been made to improve the sanitary facilities in most large cities in Africa, particularly the water supply (including the supply of pure drinking water) and the sewerage system Most of these systems remain inadequate, however, and have neither kept pace with the needs of the continually increasing population nor, in general, been extended as yet to the majority of the African settlements For reasons which have already been discussed, large numbers, and sometimes a majority, of the African urban population lives outside the city limits, and such sanitary services as sewerage and garbage disposal do not extend to them In many urban areas, drinking water supply systems are inadequate, and, moreover, are restricted during the dry season "It is for this reason that on the outskirts of these towns many unfaced wells have been dug without authorization, near the houses and at no distance from latrines, also unfaced This juxtaposition of wells and latrines is apparently responsible for the high incidence of salmonellosis in towns which are said to be provided with pure water "[85] In other [illegible]

sumers who can afford it [86] Much work also has still to be done in the prevention of infection from unsafe food and milk The endemic character of amoebic dysentery in practically all African towns illustrates the importance of food control and of public education in this matter The problem of the milk supply is rendered all the more serious because contaminated water is often used for purposes of adulteration [87]

### Nutrition

Almost all studies on nutrition in African cities have revealed important dietary deficiencies and the existence, often widespread, of malnutrition These conditions are not peculiar to the cities, but are characteristic of African rural society, where they are caused by various factors, the most important being

(1) *The seasonal alternation of comparative abundance and near-famine*, aggravated by excessive consumption on ceremonial occasions, the persistence of faulty methods of cultivation, soil erosion, the exodus of young men from the country, and sometimes, as in Ruanda-Urundi, population pressures on the land,

(2) *Faulty nutrition habits*, due to ignorance, traditional taboos or environmental circumstances Staple foods are cereals or tuberous or herbaceous plants, which, according to the territory, may be maize, millet, cassava, yams, rice, plantains, etc Greater consumption of milk and meat, which would be important to supplement the basically starchy diet, is limited in some areas by the prevalence of the tsetse fly and the subsequent impossibility of raising cattle, or by semi religious values attached to cattle

Malnutrition starts in young children particularly as a result of the sudden shortage of protein when the child is weaned from his mother, starchy gruel is then commonly given to children, and there often develops the protein deficiency disease known as kwashiorkor, which may result in serious damage to some vital organs of the body and chronic ill health throughout life

Much urban malnutrition in Africa represents a transfer to the city of faulty nutrition habits and other factors of rural malnutrition The city, however, may also contribute serious adverse influences of its own For example, the diets of male migrants coming to the city alone without the female members of the family—who traditionally prepare the meals—have been found to be especially defective if these male migrants are left to their own devices in getting meals (they often lack cooking [illegible]

of these working women are weaned very early, with ill effects on their nutrition

Another difficulty which African newcomers to the city usually have to face arises from the fact that rural diets are based mostly on self-production, whereas urban diets consist to a large extent of purchased food The idea of buying food is alien to African traditions, and rural Africans moving to town often have difficulty in understanding why they should spend most of their earnings on food [88] There are instances to show that, in the absence of necessary measures to safeguard nutritional interests, the diets of rural people may deteriorate when they move to urban centres For example, surveys carried out among the Bantu in the Union of South Africa revealed the deterioration in dietary habits which takes place when the Bantu is urbanized [89] The normal rural diet of whole grain cereals and milk is all too often replaced by refined maize meal, white bread and mineral water when the Bantu comes to the city Efforts are being made, therefore to spread nutrition education among the urban Bantu to counteract the faulty food habits following urbanization

On the other hand, the city, with its external trade contacts and its modern techniques of food preservation, is not as much subject to seasonal alternations as is the countryside, the variety of available foods is greater, and the schools, factories and other places where Africans are regularly brought together for a common activity provide the opportunity for organizing nutritious meals free of charge or at low cost The dietary advantages

[85] Dr M A Vaucel *Sanitation and Epidemiology*, World Health Organization, WHO/Env.San./84, 13 October 1955, p 3

[86] J Chénière, "Brazzaville", *France Outre-Mer*, Nos. 309-310, August September 1955, p 14

[87] Comhaire, *Aspects of Urban Administration in Tropical and Southern Africa*, p 82

[88] See, for instance L. J Roberts, *Report on Home Economics Education and Related Programmes in the British Protectorate of Uganda* Food and Agriculture Organization, FAO/56/3/1929, February 1956 p 25

[89] Detailed information on the diets of the Bantu in the Union of South Africa is provided in the 1955 Progress and Programme Report of the Union of South Africa to the Food and Agriculture Organization.

of urban living primarily accrue to the regularly-employed and stabilized labour force, it has been reported that there may be a considerable deterioration in the physical and nutritional conditions of many Africans when they return to town after a visit to their home areas [90] While further study is clearly required to get a comprehensive picture of the impact of urbanization on the diet of the Africans in various parts of Africa and under various conditions, the results of the majority of recent studies indicate that the urban diet of the irregularly-employed migrant worker is apt to show both a quantitative deficiency in calories and a qualitative deficiency in proteins, calcium and various vitamins It often consists almost exclusively of a staple cereal, palm oil, a small quantity of fish or meat, and salt, with too little attention paid to green vegetables and fruit Another factor frequently contributing to malnutrition is reported to be a faulty spacing or an insufficient number of meals, quite apart from the quantity or quality of food consumed [91]

The deficiency of the average worker's diet was clearly illustrated in Brazzaville, when a striking improvement in the health of the workers of certain undertakings occurred after two workers' restaurants had been opened, serving balanced meals at low cost to the employees [92] Four community restaurants of the same sort have been opened in various districts of the port of Douala, with similar beneficial results [93] Likewise, military personnel and, in some cases, government officials or employees, to whom special and generally well-balanced and adequate rations are issued, or for whom restaurants or canteens are maintained, have shown very rapid improvement in health and " constitute to some extent a nutritional test of what can be expected from proper dietary habits " [94]

The major factor affecting the nutritional status of African urban workers, particularly those who have brought their families with them, is probably the low level of wages Other items of expenditure, such as lodging compete with food for these very limited funds Among higher paid workers and even minor (junior) government officials, the need to present a good appearance and demonstrate that one has made the transition from " uncivilized " status creates new desires (mainly for clothing) which may be satisfied at the expense of diet The provision of rations as part of wages can no doubt help to counteract the bad effects of low income upon diet, but this represents a policy and an approach to the African, once widespread by custom or by law, which is now being given up except in mining areas and among military personnel Employers who have followed this policy in the past are increasingly providing a monetary allowance in place of rations, this allowance, however, is not always sufficient to ensure adequate nourishment, even if it were used only for that purpose In some cases, it had also been found that this practice on the part of European firms of giving cash instead of rations to the African employees has encouraged the African city worker to change his traditional feeding habits and shift to the consumption of European-made foods, such as white bread, sugar, soft drinks, tea and patent foods, items of this type are not necessarily of greater nutritive value than the traditional diet items, and are generally far more expensive, so that the effect upon the diet is unfavourable

The problem of inadequate funds is often aggravated by the practice—widespread among traders—of selling goods not by weight or in sealed containers, but by lots, often representing a fixed sum of money The lots thus prepared are first measured by the handful or the cupful rather than by the scale, and the quantity purchased is quite commonly less than the quantity that should have been sold for the p[illegible] tions exist, this is [illegible] tions are evaded [illegible] ing in effect to cheat or mislead the African consumer, are quite widespread (in regard to non food articles as well), as indeed may be expected among a people lacking experience in a market economy, unless specific measures of consumer protection are adopted and enforced

Various studies have compared food intake patterns in cities with those in the rural areas In the rural parts of French West Africa, the average food intake in calories is at its peak immediately after the crop is harvested in the autumn and gradually falls to its lowest level—below 1,000 calories a day—from mid-June to the end of August, rising again to a maximum of somewhat over 3,000 calories a day in November [95] In the city the pattern follows to some extent the seasonal fluctuations, but also the increase or decrease of financial and other resources The availability of money at the beginning of the month, following pay day, results in much greater expenditure at the start Thus food is much more plentiful during the first two weeks, and the situation becomes increasingly difficult during the second two weeks of the month Graph II provides a comparison of rural and urban food consumption, according to the results of a study in this area

In Dakar, where the staple foods are rice, sorghum, [illegible] cause of difficulty, even in comparatively well to do families, was the frequent influx of expected, or more often unexpected guests, ranging from visiting relatives to various fellow-tribesmen appearing at mealtime and almost invariably well received

[90] Communication from the Regional Office for Africa of the World Health Organization Nairobi 29 March 1956

[91] See Dr C. H Northcott, " African Labour Efficiency Survey " [in Nairobi] *Social Implications of Industrialization and Urbanization in Africa South of the Sahara* p 133

[92] Balandier op cit, p 56

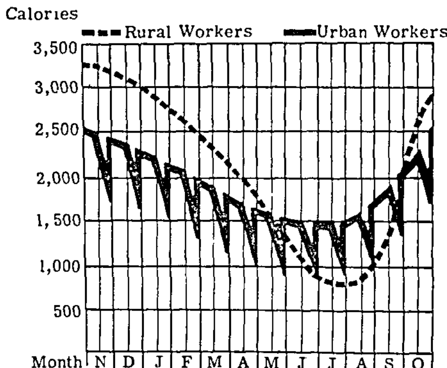
[93] " Douala et la région du Wouri " *Chroniques d Outre Mer*, No 22, February 1956 p 15

[94] See Leon Pales, *L'alimentation en Afrique occid* (Dakar, O R A N A, 1954), p 69

[95] Since children and aged people have been included in the family surveys the actual daily [illegible]

*Graph II*

CALORIE CONSUMPTION IN FRENCH WEST AFRICA [96]




A study in a township in Northern Rhodesia found that in families with low income (unskilled workers), most of the salary was probably spent on food yet "only one family during one week [of the four-week period studied] managed to achieve a diet which exceeded, in all nutrients, the level taken as standard" (a level based not on an optimum, but simply on an adequate scale), and "under present wage conditions it would be impossible for more than 30 per cent of the households in the Main Location and 56 per cent of the households in the Township to maintain [a reasonably adequate diet] throughout the month" [98] Under normal conditions, the urban African in this and other areas eats two meals a day (mid day and evening) based on a staple food and the addition of some relish, meat, fish sauce, etc Towards the end of the month, this is often reduced to one meal Only in exceptional cases does the African unskilled worker's family follow the European urban habit of eating three meals a day

Considerable differences in dietary practices have been noticed among the various tribal and regional groups within cities, and also between adults and children Thus, it would appear that very often, particularly among the poorer families, men on the one hand, a d women and children on the other, eat separately, the men's diet being generally different and of a better quality [99] It is also reported that at a very young age, and particularly after the birth of another child, children may be left to find sources of food by themselves outside their home—through paid work, sharing food with other children in associations known as "parka", begging food or stealing it—and many become accustomed to going without food for extended periods The proportion of under-nourished children in a given city may reach 50 per cent

Where African families are housed in compounds or camps, they usually cook and eat in groups of three or four households When the wives are visiting their home tribe, the men generally eat at the home of another married couple When single men do not eat in restaurants or canteens, they sometimes eat together, one of their number or, more generally, a younger man cooking for them

## RURAL-URBAN RELATIONS

As in other parts of the world, the urban and rural areas in Africa south of the Sahara continuously interact, and the impact of urbanization and industrialization has contributed to the decline and, in some cases, disintegration of the traditional social system even in the countryside These changes, however, cannot be attributed exclusively to urban development under European influence In fact, the tribal system, in the form of a rather loose association of extended families or clans claiming common ancestry, had already been under-

[96] Reproduced from Pales op cit, p 71

[98] [illegible]

[99] [illegible] all ate separately while in the remaining 14 per cent, parents and children commonly ate together (see Comhaire-Sylvain, op cit., p 70)

mained in various places, even before the advent of large numbers of Europeans and the growth of Western type cities[100] Various factors had contributed to the decline of the tribal associations prior to urbanization the slave traffic long organized in some parts of Africa by Arab slave traders and greatly expanded by Western traders in other parts until the nineteenth century, the sale of guns and gunpowder, which favoured the expansion of centrally organized chiefdoms and kingdoms based more on military power than on kinship ties (except for kinship ties among the ruling class), large scale migratory movements and invasions, with mixing of peoples and the influence of religious creeds conflicting with the ideological foundation of tribal authority, especially the penetration of the Moslem religion from the north

Quite apart from urbanization, the presence of European adm [illegible] ws in rura [illegible] of author [illegible] ed individual mobility and the acquisition of new experiences (It also caused a rapid increase of population by eliminating inter tribal wars) The introduction of a money economy, through payment for cash crops, porterage, road building etc, weakened the traditional social economic system whereby labour was considered a social duty to the community, not a source of individual income New forms of authority, new economic opportunities and new ideas in turn gave the younger men much greater independence than in the past and inclined them to challenge the authority of the elders, who traditionally exercised control over material goods as well as over political and social activities

While such circumstances have exerted their influence independently of urbanization, it is at the same time true that in the process of urbanization, factors of change are much more concentrated and intense than they are in any rural situation Movement to the city—which has been itself a symbol of social change in rural Africa—has intensified the transformation of African social structure through its simple physical effect of disrupting the geographical basis of tribal grouping and action through its economic and social effect of establishing a new relationship between work and family or community through its educational effect of providing new ways of thinking by its concentration of schools and media of communication, etc

## Education

It would be difficult to exaggerate the importance of education in this process Schools have been and still are primarily located in the urban areas Thus in the 1954 Gambia government expenditure on education in 18 000 inhabitants of Bathurst and the surrounding territory, was nine times as high for the approximately forming what is known as the Colony, as for the more than 260,000 inhabitants of the Protectorate, 2,721 children were in primary school or kindergarten in the Colony, in comparison with 1,025 in the Protectorate For secondary education the corresponding figures were 512 and 112[101] In Sierra Leone eleven of the thirteen secondary schools for the whole territory are located in or near Freetown, the capital city, and only two in the rest of the territory[102] It has been estimated that in some French territories in 1951, at least twice as many primary schools existed in the coastal areas, where the main towns are located as in the interior[103] while about 50 per cent of the children of school age were attending school in Dakar the proportion in villages was not infrequently one per cent or less[104] In Nigeria while less than 10 per cent of the total population can read and write in Lagos about one half of the population of seven years of age or older is literate[105] In secondary schools in Ethiopia in 1953 1 704 children (including the 86 girls receiving secondary education in the country) out of a total attendance of 1,839 for the whole country were receiving such schooling in the capital[106] In all parts of Africa, the limited though growing number of professional and technical schools open to Africans are concentrated in or near the cities

While in former days the tribal chief and elders were sometimes strongly opposed to school attendance, there has been in recent years a considerable change, as the advantages of education in obtaining better jobs higher pay and greater prestige have become recognized Education is now regarded as a financial investment by most parents or relatives who expect a material return from the educated child There is now a practically universal demand for increased educational facilities This growing demand for education has created serious problems in towns not only because the provision of schools is insufficient to accommodate the number of children but also because many children from rural districts who are unable to find a place in a boarding school but who have made their way to town to attend a day school are obliged to find lodgings with relatives or friends or even with strangers in return for which they make themselves useful around the house There can be no doubt that many children have to pay a ghastly price in squalor and servitude [107]

[100] In addition to loose tribal associations, traditional African society has been characterized by archaic state systems in the form of centrally organized chiefdoms and kingdoms and by many small autonomous and isolated kinship communities See Daryll Forde "The Conditions of Social Development in West Africa" Civilisations vol III No 4 (1953) pp 471-485

[101] See Van Der Plas, op cit pp 4 34 95 96 101

[102] See Report on Sierra Leone", *African World* December 1955 p 15

[103] For detailed figures and discussion see Sœur Marie André du Sacré Cœur *La condition humaine en Afrique noire* (Paris Grasset 1953) pp 176-177

[104] "L enseignement dans les territoires d Outre mer et territoires associés" *La Documentation Française Notes et Études Documentaires* Série Outre Mer LXIII No 1 816 19 July 195[illegible] p 16

[105] See *The Economic Development of Nigeria* International Bank for Reconstruction and Development (Baltimore The Johns Hopkins Press 1955) p 11

[106] See Ethiopia Chamber of Commerce *Guidebook of E[illegible]* [illegible] 1954) p 41

One problem of African education—characteristic of many other areas as well—is that the large majority of Africans who have received an education beyond the most elementary grades have shown a marked preference for white collar jobs, in public employment in particular In rural areas also, young Africans with some degree of education are reluctant to turn to agriculture for a livelihood and, as noted above, they are apt to migrate in search of other forms of work This type of problem is perhaps inevitable in any society where individuals are eagerly seeking to make a transition to a modern, more highly reputed way of life, they avoid employment related to the traditional way of life, but look instead for the kind of work (e g , white-collar work) that symbolizes the new [108] At the same time, in many cities, especially the older and more developed cities of West Africa, where the increase in the numbers of youth with some four to eight years of schooling is far outstripping the possibilities of clerical employment, an increasing proportion of such youth have necessarily to accept other types of employment In a recent study conducted among fifth and sixth grade children in two government schools in a large African urban community in Northern Rhodesia, it was found, in fact, that while ' formerly clerical jobs were more preferred, to be a skilled worker was [now] the most desired goal for the boys " [109]

Another problem which is general in Africa, but which has especially serious repercussions in the towns, arises from the fact that, almost everywhere, in spite of recent progress, women's education is still lagging far behind, both qualitatively and quantitatively This has been attributed to such varied causes as traditional prejudice, financial difficulties, a lack of women teachers, and early marriages The general inadequacy of women's education is considered a serious obstacle not only to the social and economic rise of African families, but also to the education of the children Thus, it is reported that the children have to " spend two or three years, after [they have] gone to school, learning what the European child knew before it went to school ' [110] It is also considered that in many instances the average home does nothing to supplement the education given the child in school, but rather neutralizes it [111] Thus, there is often a gap between the family and the school [112]

A major purpose of school training today is to prepare youth to fulfil the rapidly growing demand for skilled technical or professional workers arising from the general development of the country The trained African can usually find suitable employment corresponding to his educational level, except where racial discrimination or occupational colour bars severely limit access to jobs or professions Education, however, may become itself a means of breaking down racial barriers

#### Persistence of the traditional social system, tribal and other associations

While the traditional African social system has been changing, it has, of course, by no means disappeared In some cases, the policies of European powers have helped to preserve it, as in the older British policy (in certain territories) of " indirect rule ", which maintained the authority of the African chiefs, or the recent tendency in South Africa to strengthen the African chiefs in the Bantu reserves [113]

The tribal system still plays an important role even in the cities, although in modified and adapted form It serves to influence the selection of friends and to maintain links between advanced and less advanced members of the population Tribal bonds in cities [illegible]

[illegible] in the immediate vicinity of the city or formerly on the location of the city before the latter was built) The persistence of the influence of tribal and kinship groups has been noticed even in some relatively older cities or suburbs like Bacongo,[114] one of the more settled Brazzaville suburbs Africans residing in urban areas frequently maintain also a dwelling in their village of origin, a practice that tends to keep their tribal connexions alive, or they maintain some other form of regular contact with their villages [115] The importance of kinship has also been demonstrated by its influence in the sub letting of houses or plots Thus, in a Stanleyville sample, 34 9 per cent of the sub letting tenants were closely related to the original householder, and 24 3 per cent were less closely related, while 40 8 per cent were unrelated Although rent was paid by none of the near kinsmen and by only a few of the more remotely related ones, 82 per cent of the unrelated paid rent [116] At the same time, housing shortages in urban centres may force a dispersal of related families

In a good number of African cities today, associations of peoples with the same kinship or tribal background —called " tribal unions " or " tribal associations —are to be found Some of them originated in the practice followed by chiefs—at the time when growing numbers of their men were being recruited for urban work—of sending some high ranking elders or relatives to supervise and assist their kinsfolk and keep tribal organization

[108] A study of occupational preferences among school [illegible]

[illegible] op cit. p 465)

[109] H Powdermaker, op cit., p 799

[110] " Home Education of the African Child ", *African Women*, vol. I, No 2, June 1955 p 31

[111] *East Africa Royal Commission 1953 1955 Report* p 183

[112] " Le probl me de l enfance outre mer ", *Chroniques d'Outre-Mer*, No. 4, April 1954, p 13

[113] See *Tomlinson Report*, p 66

[114] See Balandier, op cit., p 126

[115] See E. Hellmann, " The Development of Social Groupings Among Urban Africans in the Union of South Africa ", *Social Implications of Industrialization and Urbanization South of the Sahara* p 731

[116] See V C Pons " [illegible] Ethnic Affilia-[illegible]

and solidarity in the city These tribal unions function largely as protective agencies for their members, serving to mitigate some of the immediate effects of poverty, to extend into the city the traditional mutual help system, and to ease the process of settlement and adaptation for new arrivals They therefore assume special importance during the transitional period, especially in cities where public or private social security schemes are not yet developed and where other forms of association, such as trade-unions, are not yet well established

In Poto-Poto (Brazzaville), where more than sixty different ethnic groups live, spontaneous associations for mutual assistance in securing lodgings or better employment were found to be generally based upon ethnic affiliation [117] In the towns of British West Africa, associations based on tribal affiliation—mainly for mutual benefit and assistance in repatriation, funerals or other ceremonies—facilitate adjustment to the new urban circumstances, and are considered to be an important focus of the migrant African's interest and activities In Nigeria, tribal associations have also been organized spontaneously in the new urban centres, where they express the persistence of the strong feelings of loyalty and obligation to the kinship group or the native village In the Gold Coast, tribal associations with regular meetings give their members financial assistance in case of need, provide funeral benefits and scholarships for children of their members, form a link with the tribal areas and are a potent influence for order in the city where they represent to some extent the old tribal sanctions [118]

"In Johannesburg, as in other South African towns, 'stockfel' societies are a common type of African association They consist of clubs with a varying membership, and their main activity is the pooling of wages Burial societies also are most popular and no family budget can be drawn up without some provision for this purpose Tribal unions are powerful in some cases, especially the Bapedi Club, in Johannesburg, but they meet, for all practical purposes, with the competition, on one hand, of the smaller 'stockfel', and, on the other hand, of European and American institutions such as the Good Templars or the Order of Elks " [119]

Elsewhere, as in Leopoldville (Belgian Congo), mutual aid associations are said to be numerous, but not necessarily based on tribal relationship Their basis may be geographical, as an association of all up river people, or quite accidental, as the possession of a common Christian name Some of them are mixed They generally have weekly meetings and always give assistance to meet the cost of ceremonies such as marriages and funerals In Stanleyville, there were in 1953 twenty authorized associations (not counting professional or trade union associations or associations in the process of formation) and about forty-five unauthorized associations Six of the authorized associations were based on tribal or regional origin, and a large number of the unauthorized ones were similarly based, it appears that each tribe having a sizable number of members in the city has its own association, some even having two, one for men and one for women Other bases of association included various criteria, such as degree of "advancement" of members, school attended, occupation, and residence, sometimes the criteria were cumulative [120] In Nairobi, the associations are generally based on occupational groupings which, however, often follow tribal grouping This is also true of various other African cities, where it has been noticed that members of certain tribes or ethnic groups engage in particular trades or vocations and their kin who follow do the same (for example, in Kenya, the Kikuyu are often traders, the Kambas craftsmen or mechanics, and the Luo domestic servants)

There are also in many towns associations based on membership in a sub tribe or clan It is noteworthy, however, that the presidents or leaders of these associations are apparently chosen for their personal leadership qualities as shown in town life, rather than for the rank they held in the native environment At the same time, traditional chiefs visiting the towns are treated with honour and are generally entertained and offered gifts by members of their tribe

An interesting example of a tribal welfare group is provided by the Watuttsi Dancers of Kampala Members of the Watuttsi welfare association in Kampala, they put on from time to time exhibitions of traditional dances, before audiences of Europeans and Africans of different tribes The money collected at these functions is turned over to the Watuttsi welfare association to assist Watuttsi projects, including aid to destitute Watuttsi in Kampala, etc The Ba and Banyurwanda associations in certain cities of British East Africa aim, among other things, at caring for immigrant tribesmen who become destitute in the city They generally arrange either for their return to the tribal area or for their rehabilitation and employment

While tribal and kinship associations tend to maintain to some extent the influence and sentiments of the traditional system, their functions tend to be limited to social welfare activities, many of which, it is assumed, the state will in time take over The integration of the African into urban society is facilitated also to an increasing extent by various forms of associations related to occupation, religion, education, politics, etc, in which the tribal or kinship system plays a much smaller role or is completely left behind The growing organization of African workers into European type trade unions has been noted above There have been in many cities other occupational groups which can be considered as a mixture of the traditional craft guild (such as still exists in the Yoruba and Fulani cities of Nigeria) and the modern trade union, and sometimes also the cooperative (for instance, the butchers' association in Bathurst, Gambia; the mutual association of houseboys in Stanleyville, and the fishermen's associations in

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[117] See Balandier op cit., pp 116 ff

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[119] ... maire, *Aspects of Urban Administration in Tropical and Southern Africa*, p 89

[120] See Pons et al., op. cit., pp 472-492.

towns of the Gold Coast) The aims of these associations, which are inter-tribal, are generally similar to those of the traditional guilds There are also women's trade associations, in particular for marketing (as in the Gambia and Sierra Leone) and mutual aid This type of association even extends in some cases to prostitutes, as reported, for instance, in Brazzaville [121] Sometimes, the occupational associations may serve as a transition between the guilds and modern trade unions, and they have been used as a means of contact between the trades and the administration, to make representation concerning conditions of work or trade facilities They also function, as do the tribal associations, as a means of mutual insurance against destitution, sickness or death

Other associations are based on religious movements or church allegiances of the numerous Africans who belong to one of the Christian denominations or to the Islamic faith Finally, there is a growing number of recreational or social clubs, some of which may also have educational purposes In Sierra Leone, for example, ladies' clubs and women's institutes have recently taken a leading role in spreading the study of home economics, particularly cooking and sewing, and are regarded as a means of useful contact between literate and illiterate groups Dancing and welfare groups also bring persons of different tribes together in common association and to some extent bridge the gap between the literate and the traditional worlds, such groups also provide mutual aid and protection where the kinship system no longer performs these functions They also may fill in the gap left by loss of mores and sanctions deriving from tribal or patriachal authority, for example, some intervene in domestic quarrels to effect reconciliations, etc In very exceptional cases, clubs and associations have also been founded on a multi-racial basis This has been attempted especially in East Africa, but in general, their success has been rather limited so far

It should also be noted that, especially after the Second World War, when large numbers of Africans served in the armies of the various administering countries, ex-servicemen's or veterans' associations were created almost everywhere with official encouragement or sponsorship and have often greatly contributed to recreational and welfare purposes (in cities like Dar-es-Salaam, Nairobi, etc )

All associations, tribal or otherwise, constitute a framework into which the isolated and often confused and insecure individual can be fitted and in which he can find meaning and common interest While many associations keep alive tribal loyalties and perhaps may be considered in this sense to offer obstacles to the development of civic responsibility of a new type, they [illegible] transition from [illegible] medium for re- [illegible] impersonal [illegible] ntial feeling of belonging " [122] In towns where African associations are not very numerous or active, it is reported that their absence "helps to perpetuate urban instability by reducing the possibilities for satisfactory social life in the town " [123]

## Urbanization in relation to family life and social pathology

The African family has been described as "the most significant feature of African society" and its "central institution" [124] Marriage in the traditional African society is not only an agreement between two individuals, but also the conclusion of an agreement between two kinship groups It is a basis of the system where co-operation in tilling the fields or herding the cattle is provided by people bound by the obligations of kinship and not by the relationship of wage-earner to employer A major, though now declining, feature of African marriage is polygamy

Another common characteristic of African marriage has been the payment of a bride price, generally in kind (e g , cattle) This practice still plays an important role in the life of Africans, particularly in central Africa With the development of a cash economy, it may absorb a large share of a young man s earnings over a period of time, and it has given rise to innumerable conflicts and difficulties between husband and wife or husband and wife's family Where the system is fully in force, the wife tends to be regarded both by her husband and by her own family from a commercial point of view, this circumstance naturally constitutes a major obstacle to the social progress of women Furthermore, in return for the payment of a bride price, the wife is expected to contribute in large part to the maintenance of the household and the feeding of her husband and children In the traditional rural society, this was done usually by raising food on land prepared by the man, in the cities, however, the wife may feel it necessary to engage in work outside the home, even if it should not be economically necessary, in order to fulfil her traditional obligations, this fact contributes to the breakdown of the family and the neglect of children

The introduction of modern economic factors and incentives and the absence (periodic or prolonged) of an increasing number of young men have caused considerable disruption of the traditional African family, even in the rural areas [125] Conditions of life in urban

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[121] See Balandier, op cit, pp 146-147 Conversely, it has been [illegible]

[122] [illegible]

[123] Sofer and Sofer, op cit, p 112.

[124] See Arthur Phillips, ed , *Survey of African Marriage and Family Life* Published for the International African Institute (Oxford, Oxford University Press, 1953), p ix

[125] The introduction of a money economy has tended, for instance, to secularize the bride price (thereby weakening the bonds associated with it) and the customary services which young men owed their fathers in law (in lieu of which goods or money are now offered) (See R Thurnwald, *Black and White in East Africa* (London, George Routledge and Sons, 1935), pp 108 *et seq*)

areas have had a particularly destructive effect, since the traditional marriage customs have not only often proved unsuited to urban environments, but have also become an obstacle to marriage Other major obstacles to marriage of Africans in the cities are the following [126]

(a) *Adverse sex ratio* In all cities, and in spite of recent and continuing general improvement, men have been found to outnumber women considerably For instance, the following approximate adult sex ratios have been reported In the urban areas of South Africa, less than 50 women to every 100 men, in Leopoldville, 57 women to 100 men, in Elizabethville and in Douala, 60 women to 100 men, in Dar-es Salaam, 75 to 100, in Brazzaville
of a relatively
"42 4 % of
survey had wives living elsewhere and the most important single reason given was that the wife was required to look after the land and care for the family " [127] It has also been found, as a result of various studies, that the sex ratio may be even more disproportionate in suburban areas than within city limits (e g , Kampala),

(b) *Changes in the traditional status of women* In the traditional African society, the status of the wife is usually inferior to that of her husband, but in the city, where she is generally at a premium, she is likely to revolt against this inferior status Many young women have, like men, come to the town precisely to escape

to live in concubinage for varying periods, or even to practice prostitution,

(c) *Economic difficulties* Insufficient wages and inadequate housing also play their part in preventing marriage But the main economic obstacle appears to be the considerable increase in the bride price (especially for the better-educated women), which is often accompanied by expensive gifts and further expenditure on marriage ceremonies As a result, many young working men are incapable of earning the money necessary to cover these expenses,

(d) Prejudice against inter-tribal marriage also sometimes acts as a deterrent to marriage

Other tend to
compron ibal
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families and different tribal areas, to divided allegiances and conflicts of authority and of laws of inheritance, especially when conflicting matrilineal and patrilineal family systems are involved Difficulties also arise as a result of conflict between the traditional practice of polygamy and the practice of monogamy The latter prevails in urban areas, where economic difficulties have a restrictive influence on polygamy, as well as legal or religious forces, in fact, except in a few cities where a majority of the inhabitants are of the Moslem faith, the open practice of polygamy has apparently almost disappeared among the urban population [128] There are numerous cases, however, of men who come to work in town and who marry there although they have already contracted a customary marriage in the rural area, the maintenance of relationship with the first wife then creates problems

Under current conditions of urban life and in the absence of tribal and customary sanctions and mores, the institution of marriage has encountered difficulties and has been weakened, at least temporarily, by widespread prostitution and adultery, and by frequent divorce followed by almost immediate re marriage In Brazzaville, for instance, the great competition for women is reported to have led to a very large increase of legal cases concerning adultery, divorce, claims for sexual services, and even incest Most women prefer concubinage to marriage, at least when they are young, while some married women engage in prostitution with varying degrees of complicity on the part of their husbands [129] In Sekondi-Takoradi,

> " the evidence of the collapse of sexual morality includes the frequency of pre marital sexual relationships, as well as of divorces due to adulteries, but its most obvious index is the growing practice of prostitution, favoured by the presence of a large unmarried male population, African, European, Indian and Syrian, and the regular visits of seamen " [130]

In an African suburb of Johannesburg, while "the practice of prostitution is generally condemned by the women [and] although a goodly proportion rebel with all their being against [it] and hold themselves

The economic emancipation of women in the city, and the frequent necessity for them to contribute to the family budget have sometimes caused them to neglect their family role, leading to family instability Another widely-reported cause of family instability is the housing shortage and the subsequent overcrowding and promiscuity

The number of marriage breakdowns, which is very high in most cities, does not seem to be markedly affected by the type of marriage contracted The overwhelming majority of marriages are still contracted under traditional custom,[132] with a small but growing percentage

[126] Large numbers of men (over 40 per cent, in the Broken Hill sample, and about 57 per cent in Leopoldville) and even of women remain unmarried

[127] Sofer and Sofer, op cit., p 102.

[128] Thus, in Broken Hill, only 200 out of 3,500 women in a sampling were polygamously married (Wilson, op cit, p 156), and in Elizabethville, only 4 per cent of the men had more than one wife (Grévisse op cit p 295)

[129] Balandier, op cit, pp 53 54

[130] Busia, op cit., p 107

[131] E. Hellmann, *Roolyard, A Sociological Survey of an Urban Native Slum Yard* (Capetown, Oxford University Press, 1949), p 50

[132] Ninety three per cent in Elizabethville, 61 5 per cen
Witwatersrand cities of South Africa, and 80 per cent
ville,

under civil law, or with religious (Christian or Moslem) rites, or both

PROBLEMS OF YOUTH AND JUVENILE DELINQUENCY

Somewhat similar problems arise in attitudes towards children and in the relationship of children to their parents In Africa, traditionally, children have been much desired, and childlessness regarded as a tragedy or humiliation [133] In the city, on the other hand, there is evidence that many parents (women in particular) are no longer anxious to have children, and the percentage of childless families or families with an only child is high At the same time, adults, including relatives, are unable to exercise in the city the same supervision and enforce the same discipline as in rural areas, and " the confusion and disorder in the relation of the sexes result in the neglect of children " [134]

" Under urban conditions it is necessary to rely more upon the parents' own initiative and discipline in family life In the customary life, it is the community which exercises discipline, even in family life but during the discussions at the social welfare conference held in the Copperbelt last year one of the problems brought out was how to persuade parents themselves to undertake the discipline of their children since they are used to relying upon the community as a whole " [135]

The lack of older people in the migratory movement from rural to urban areas " is a factor of instability in all domains as it is this age group which is the repository of tradition and experience If the presence of old people is sometimes considered as an obstacle to progress, it acts both ways it is also an obstacle to rapid deterioration If it slows up the adaptation process, it also enables the youth to remember and perhaps retain what is good in the former ways of life of their ancestors Moreover, it also means indiscipline the village youth who suddenly becomes his own master in town, without any elder to guide or protect him, is likely to misuse his newly-won freedom " [136]

The high rate of illegitimacy, parental neglect of children, and the necessity for most children, legitimate or illegitimate, to learn to fend for themselves at an early age, are factors in turn contributing to the spread of juvenile delinquency in many cities In the French overseas territories, for example, juvenile delinquency before the Second World War presented little or no problem, only in Senegal, where Dakar was already a community of considerable size, had any need been felt for special institutions to deal with delinquent youths Today, however, the accelerated urban growth " has [illegible]

the continued attention of the authorities " [137] An important cause of juvenile delinquency is neglect of children due to the fact, already noted, that the wife is obliged to contribute by outside work to the maintenance of the family The absence from town of other relatives—who surround the child in the countryside—has also often been regarded as one of the reasons for juvenile delinquency in urban areas [138] Unemployment, too, has been considered a contributing factor Thus, in Lagos, " the economic and social problems arising out of [the] influx of the unemployed has given rise to the growth of a certain class of irresponsible young men known as Boma Boys capable of any crime ranging from open burglary to trafficking in women " [139] In some cases, the lack of sufficient educational facilities and, in particular, of opportunities for further education after the third, fourth or fifth year, contributes to " the release of children, at the age of eleven or twelve years, when they can be usefully employed neither in their homes nor in industry [thus] giving rise to serious problems of juvenile delinquency " [140] In other cases, where facilities for primary and secondary education are more developed, there is evidence that many of the boys who have completed their elementary school studies (at the average age of fourteen) often experience difficulty in finding suitable employment, and " in increasing numbers [they drift], in order to live, into various forms of petty larceny " [141]

Boys who have been unable to find adequate employment to support themselves are sometimes organized by master thieves and " schooled in the technique, for example, of fighting in bus queues and picking pockets or snatching purses in the ensuing commotion [142] In fact, the large number of boys who were made active parties in crime by adults is particularly disturbing to the Government in Nigeria [143] Prostitution has also contributed to juvenile delinquency The Sekondi-Takoradi survey came across what were known as " pilot boys " in the city These boys, according to the author of the survey, were " virtual or potential delinquents fending for themselves by stealing, gambling, acting as guides to sightseers, or directing European sailors and soldiers to prostitutes " [144] Many of the " pilot boys " did not have any settled place of abode, sleeping in market stalls, or lorries or on verandahs While the number of " pilot boys " was greater during the war, they were still operating during the time of the Sekondi-Takoradi survey in 1948

[133] F Lorimer, " General Theory ", in *Culture and Human Fertility* (Paris, UNESCO, 1954) p 72

[134] E F Frazier, " The Impact of Colonialism on African Social Forms and Personality ", *Africa in the Modern World*, p 79

[135] J D Rheinallt Jones " The Effects of Urbanisation in South and Central Africa ", *African Affairs*, vol. 52, No 206, January 1953, p 42

[136] Comhaire-Sylvain, op. cit., p 14

[137] P Aubin, " La délinquence juvénile outre mer ", *Rééducation*, *No 69, August September 1955*, p 1

[138] *Ibid*, p 2

[139] H K Offonry, " Lagos—City of Antitheses ", *West African Review* vol XVII, No 220 January 1946 pp 37 39

[140] See *East Africa Royal Commission 1953 1955 Report*, p 179

[141] " Young African Delinquents—The Standard VI Boy in Nigeria ", *The Times Education Supplement* (London), 16 May 1952, p 419

[142] *Ibid*

[143] *Non Self-Governing Territories Summaries and Analyses of Information Transmitted to the Secretary-General during 1948* (United Nations publication, Sales No (1949 VI B 1) p 644

[144] Busia, op cit., p 96

The practice of sending one or more children to the country to be cared for by relatives has thus found a justification in parents' belief that the moral and physical welfare of their children is endangered in towns. In Nairobi, among certain tribes, especially the Kikuyu, it is considered a part of juvenile welfare work to prevent young people from staying in urban areas, and children are often sent back to the tribal reserves when they reach the age of ten or twelve [145]

### FUTURE TRENDS IN SOCIAL STRUCTURE

As African urban society becomes more settled and stable, physically and occupationally, it will doubtless also acquire greater social stability, and some of the problems described in the preceding paragraphs, arising as they do from the ferment and fluidity of the present situation, will be reduced in magnitude It is too early as yet to distinguish clearly the future structure of this society. Whether the small independent "nuclear" family of the western type will become firmly established as the norm in the near future will depend on various factors.[146] The extent to which a class system may emerge and solidify, dominated by an *élite* group of those Africans who first acquire education, modernization and extensive private wealth, is another important question for the future, as is the relationship that will become established between the educated urban and the illiterate rural segments of African society

There is evidence today in many African cities of the beginnings of a social structure based on economic and cultural differences rather than on racial or tribal [147] criteria, as in the past Among recent studies of the African urban structures, some [148] have considered that classes—including, in particular, middle classes (consisting in general mainly of public officials, employees and members of the professions) could already be clearly distinguished in certain cities, others [149] consider that while several strata are distinguishable among the African city populations, it is too early to speak in terms of classes in most cities, since racial and political tensions, on the one hand, and tradition on the other, combine to oppose the formation of broad economic groups with conscious common interests

There is, in any case, an emerging group of Africans called in sociological studies the "African elites",[150] who are more advanced than their fellow countrymen in the adoption of modern ways of life and who have a special role of leadership to play, varying according to the political status of their country and the degree of advancement of the African inhabitants They include the well-educated Africans—members of the professions, teachers, various public functionaries, etc—and occupational or business leaders, consisting of successful contractors, tradesmen, craftsmen, small manufacturers, foremen, labour leaders, etc. They also include to an important extent representatives of the traditional or tribal élite—chiefs, headmen, leaders of societies and sects, and other notables—who have maintained or enhanced their status by acquiring modern education and culture, developing administrative abilities and increasing their material wealth through participation in the money economy Differences of opinion exist among and within these groups as regards the future development of African society The educated or intellectual élites show the greatest preference for modern ideas and for assimilation of western culture, the traditional élites the least Among the traditional elites, however, there may be found an active minority "who wish radically to change the old order of things, and who hope that the principles of European civilization will triumph", conversely, members of the intellectual leadership may be vigorously opposed to "slavish copying of Western civilization", seeking to perfect "a distinctive culture of their own with the help of European civilization" [151] In fact, since the Second World War a tendency has been noted in some parts of Africa for members of the educated, intellectual leadership to re-emphasize certain traditional elements

The relation of the African elite groups to Europeans and European civilization is correspondingly complex and varied, ranging from sharp separation of interests and values to efforts for complete identification In [illegible]

territories, "there is also a certain danger that the new elite, elated by its rapid rise and sense of power, may draw apart from the mass of the people and become so alien in modes of thought that it would no longer be in any way imitable by the rank and file".[152]

The development of a new culture, which will be [illegible] it is deeply [illegible] with problems of race [illegible] and political evolution.

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[145] Comhaire, *Aspects of Urban Administration in Tropical and Southern Africa*, p 91

[146] J Comhaire, "Some Aspects of Urbanization in the Belgian Congo", *The American Journal of Sociology*, vol LXII, No 1, July 1956.

[147] See Little, "Structural Change in the Sierra Leone Protectorate", p 225

[148] See International Institute of Differing Civilizations, *Development of a Middle Class in Tropical and Sub-Tropical Countries* (Record of the XXIXth Session held in London from 13th to 16th September 1955 (Brussels, 1956)), pp 159-253

[149] See, for example, G Balandier, "Déséquilibres socio-culturels et modernisation des 'pays sous développés'", *Cahiers Internationaux de Sociologie*, vol XX, 1956, pp 30-44, J C. Pauvert, "Le problème des classes en Afrique équatoriale", *Cahiers Internationaux de Sociologie*, vol XIX, 1955, pp 76-91, and P Mercier, "Aspects des problèmes de stratification sociale dans l'ouest africain", *Cahiers Internationaux de Sociologie*, vol XVII, 1954, pp 47-65

[150] See the collection of articles on "African élites" [illegible]

[151] [illegible]

[152] S Leith Ross, "The Rise of a New Elite A[illegible] of Nigeria", *ibid*, p 437, and P. Mercier, "Evol[illegible]lese Elites", *ibid.*, pp 441-452.

## Chapter IX

# URBANIZATION IN LATIN AMERICA

### INTRODUCTION

Latin America is a region of great diversity in geography, climate and economy, in spite of this diversity, many characteristics and problems are common to the reg on or to large parts of it These common factors are recognized and reinforced through regional social and economic consultations and through exchanges of experiences among neighbouring countries In a brief general discussion of urbanization in Latin America, it is difficult to balance accurately the factors of unity and diversity, particularly since information on any given aspect of the subject, if available at all, is likely to be available for only one or two of the countries or cities Few generalizations, unless too broad to be worth making, apply to all countries of the region, or to all cities within a given country This qualification must be borne in mind throughout the following discussion of urbanization in Latin America

Since the European settlement in the sixteenth century (and even earlier in the areas of the Mayan, Incan and Aztec civilizations) Latin America has contained urban centres that have politically and culturally dominated the rural areas Urban life has enjoyed high prestige, rural life, agricultural labour, and the rural population itself have been looked down upon It has been taken for granted that anyone who could afford to live in a city would do so—at least for a good part of the year The wide contrasts in levels of living and in culture [illegible] ost of Latin America, the "upper class" (large landowners, professional persons, and officials) has traditionally been concentrated in the cities to such an extent as "practically to define such persons as urbanites"[2] (Brazil, up to the beginning of the present century, was a partial exception, most large landowners lived on their estates and the towns were weaker than in the Spanish-speaking countries)

Until recent times, however, the economies of the Latin American countries supported only relatively small urban populations The urban middle class was particularly small and ill-defined The low income classes, composed of artisans, unskilled labourers, pedlars, and domestic servants, were reinforced by a trickle of migration from the countryside and frequently retained semi rural ways of life in villages clustered around the outskirts of the cities Employment opportunities were limited, there was little upward occupational or social mobility, and most of the rural population remained insulated from the attractions of the city by cultural separateness, illiteracy, difficulties of travel, and, in some cases, by agricultural labour systems equivalent to serfdom or peonage

Until quite recently in most of Latin America (and in a few of the smaller countries up to the present), the cities grew at a rate somewhat faster than the population in general but with only minor changes in the pattern described above The centralized Governments gradually assumed more functions and thus required more officials living in the capitals The exploitation of plantations, mines and oil fields expanded and thus increased the number of persons with business in the cities or with incomes permitting them to live there There was an important increase in the number of commercial employees and lower-level public functionaries The growing upper and middle classes increased the demand for domestic servants and workers, particularly in the building trades

Then, in more recent years, the process of urbanization began to accelerate The isolation of the rural districts began to break down and their populations to expand more rapidly Many of the Governments engaged in major highway building programmes The penetration of buses and trucks into the interior enabled the peasant to reach the capital in a day or two instead of in weeks on foot A number of factors of varying importance in different areas—shortage of land, rural poverty, the lure of urban consumption patterns and amusements, the urban orientation of rural schools, compulsory military service, civil strife in the countryside, the influence of relatives or fellow villagers already in town—have stimulated an increasing flow of migrants from the hinterlar [illegible] accelerated cityw [illegible] important expans [illegible] the increasing urban labour supply and the expanding domestic urban market, together with the cutting off of imported manufactured goods during the Second World War, helped to stimulate the establishment of industries, which then stimulated further migration

A study of urbanization in Latin America in 1946 concluded that Latin America was urbanized to a striking

[1] See, for example, chap X of the *Preliminary Report on the World Social Situation* (United Nations publication Sales No 1952.IV 11).

[2] Theodore Caplow, "The Modern Latin American City", in *Acculturation in the Americas* Sol Tax, Ed (Chicago, University of Chicago Press, 1952).

degree, considering retarded industrialization, and that its urbanization had largely come from non industrial causes [3] This study was based chiefly on 1940 census data Since then, urban growth has proceeded more rapidly than before, and has been accompanied by increasingly rapid changes in economic and social conditions, both in the cities and in the countryside The censuses conducted about 1950 give considerable information on the extent and rate of urban growth and on some aspects of the living conditions of the urban populations Only a few very small scale field inquiries, however, have been made into the characteristics of the different urban social groups [4] Recent migrants to cities, who are the major focus of interest in a social study of the urbanization process, are believed to be in general a "marginal' component of the urban population, with particularly low levels of living and inadequate adaptation to urban ways of life In considering the origins of the migrants, their reasons for migration, their adjustments to urban life, and their employment status, the present study will have to rely on statistical evidence that may not be representative, and on non-statistical suppositions made by sociologists and other authorities As in other parts of the world, conclusions on urbanization are coloured by differing values placed upon industrial urban ways of life compared with those of the rural community Some authorities claim that the present movement of people to the city is a thoroughly unhealthy phenomenon, others believe that it is accompanied by a significant rise in levels of living that existing statistics do not adequately reveal [5]

A number of authors have commented on the difficulties of adjustment to wage labour and industrial discipline, and on the lack of industrial skills among newcomers to Latin American cities Particular difficulties are undoubtedly encountered in a few Latin American countries by those migrants who are Indians by language, dress and group identification The majority of the migrants to Latin American cities however, speak the same language as the urban population, feel themselves to be citizens, and share some political, social and recreational interests with the low income classes of the city While a good many rural Latin Americans live in an economy only partly monetary the majority of migrants to the cities are familiar with wage labour [illegible]

of education, open [illegible]

[3] Kingsley Davis and Ana Casis "Urbanization in Latin America" *The Milbank Memorial Fund Quarterly* vol XXIV Nos 2 and 3 April and July 1946

[4] "Little research has been carried out, either by sociologists or by anthropologists on the modern Latin American city on the modern Latin American c ty ... socio-economic stra ... There is a critical lack of information about socio-economic stra ... differences which ... tification as well as about the basic subcultural differences which ... Although the urban proletariat is ... is the least ... n proletariat ... Town sub- ... Typology of ... ist vol 57, ... la de Medi

[5] Communication from Dr Hern... cina Universidad de Chile 28 March 1956

reason why they came to the city The migrants are likely to agree with the city viewpoint that they are backward and ignorant, and to be eager to adopt urban ways of life According to a Brazilian authority, "these rural urban migrants, as a rule are rapidly absorbed by the expanding labour market and socio cultural identification with their fellow workers is only a matter of time In metropolitan areas like Porto Alegre the working class consists mainly of Luso Brazilians but the caboclo stigma has ceased to be attached to them In fact they have eagerly adopted the symbols of urban life, especi [illegible] and recreation The [illegible] on as inferior, and [illegible] ditions of an industrial society which tends to ignore ethnic differentiation, they are in a position to compete successfully with workers of recent European background In other words, to the *caboclo* migrant urbanization means, above all, westernization" [6]

This opportunity for adjustment and upward social mobility, however, depends in large part on economic development, in other cities, particularly the smaller cities of the Andean and Central American countries, "the scarcity of large scale industrial and commercial enterprises has minimized the opportunity for the *campesino* to rise in the urban status system Thus, together with a minute gradation of social positions, we find the modern status system to include two rather clearly defined groups the one close to the hinterland in habits and outlook, the other a participant in the general undifferentiated culture of the Western metropolis" [7]

During the foreseeable future, cities will no doubt continue to grow rapidly in most Latin American countries Even if these countries are judged "over urbanized" in relation to their level of economic development, it is unlikely that any national policies can halt or reverse the trend, except temporarily In fact, although the rapidity of urban growth and its concentration in a limited number of primate cities give rise to a number of unhealthy phenomena, which will be discussed below, perhaps the most intractable problem for the Latin American countries is not the growth of cities but the relative stagnation of the countryside—a phenomenon deriving partly from the urban bias of Latin American civilization Measures to improve agricultural productivity and raise rural levels of living have received much less attention than measures to stimulate industry and benefit the city populations

In the more rapidly industrializing areas, economic imbalance and lack of integration between city and countryside are particularly conspicuous The countryside has not responded adequately to the cities' increasing demand for food [8] Consequently, cities in regions where a majority of the population are engaged in agriculture nevertheless depend on food imported from abroad, and suffer from periodic shortages caused by lack of foreign

[6] Emilio Willems, "Intermarriage among German Brazilians", *Migration News* International Catholic Migration Committee, No 2, March April 1956.

[7] Theodore Caplow, op. cit.

[8] See p 183 below

exchange or wartime shipping difficulties At the same time, rural wages and the incomes of the small cultivators are so low that the countryside does not provide a satisfactory market for the products of the expanding city industries Without a steady improvement in rural productivity and levels of living, the continued growth of Latin American cities will rest on increasingly precarious economic foundations

## Distribution and rate of growth of the city population

Table 1 indicates the demographic importance of the larger cities and the urban-rural distribution of the populations of the Latin American countries at the time of the most recent censuses; two countries (Peru and Uruguay) that have not held recent censuses are omitted The last column of Table 1 shows that only four countries (Argentina, Chile, Cuba, and Venezuela) had urban majorities about 1950 Owing to the differences in national census definitions of urban and rural, the urban populations are only roughly comparable Some countries define " urban " in terms of size, but the majority use a qualitative definition (e g , administrative centre) or some combination of size and defined characteristics In a few countries, the rural predominance may be somewhat greater than the percentages indicate, since the urban category includes small centres with populations mainly engaged in agriculture Nevertheless, the use of administrative status rather than minimum population as a criterion corresponds to the realities of Latin

*Table 1*

LATIN AMERICA URBAN POPULATION

*(In thousands)*

| Country | Date of census | | Population of largest city | | No of all other cities 100 000 and over | Population in all other cities 100 000 and over | | Total urban population as defined in national censuses [a] | |
|---|---|---|---|---|---|---|---|---|---|
| | | | In thousands | Per cent of total population | | In thousands | Per cent of total population | In thousands | Per cent of total population |
| Argentina | 10 V | 1947 | 2 981 [b] | 18 8 | 15 [d] | 3 022 | 19 0 | 9,932 | 62.5 |
| | | | 4,603 [c] | 29 0 | 8 [e] | 1 733 | 10 9 | | |
| Bolivia | 5 IX | 1950 | 321 [b] | 10 6 | 0 | | | 1,013 | 33 6 |
| Brazil | 1 VII | 1950 | 2 303 [b] | 4 4 | 10 | 4,569 | 8 7 | 18 783 | 36 2 |
| Chile | 24 IV | 1952 | 665 [b] | 11.2 | 2 | 339 | 5 7 | 3,561 | 59 9 |
| | | | 1,348 [c] | 22 7 | | | | | |
| Colombia | 9 V | 1951 | 648 [b] | 5 6 | 7 | 1,404 | 12 2 | 4,187 | 36 3 |
| Costa Rica | 22 V | 1950 | 87 [b] | 10 9 | 0 | | | 268 | 33 5 |
| | | | 140 [c] | 17 5 | | | | | |
| Cuba | 28 I | 1953 | 785 [b] | 13 5 | 2 | 274 | 4 7 | 3,325 | 57 0 |
| | | | 1,218 [c] | 20 9 | | | | | |
| Dominican Republic | 6 VIII | 1950 | 182 [b] | 8 5 | 0 | | | 508 | 23 8 |
| Ecuador | 29 XI | 1950 | 259 [b] | 8 1 | 1 | 210 | 6 6 | 914 | 28 5 |
| El Salvador | 13 VI | 1950 | 162 [b] | 8 7 | 0 | | | 677 | 36 5 |
| Guatemala | 18 IV | 1950 | 284 [b] | 10.2 | 0 | | | 696 | 25 0 |
| Haiti | 7 VIII | 1950 | 134 [b] | 4 3 | 0 | | | 377 | 12 2 |
| Honduras | 25 VI | 1950 | 72 [b] | 5 3 | 0 | | | 348 | 29 0 |
| | | | 100 [c] | 7 3 | | | | | |
| Mexico | 6 VI | 1950 | 2,234 [b] | 8 7 | 9 | 1,665 | 6 5 | 10 983 | 42.6 |
| Nicaragua | 31 V | 1950 | 109 [b] | 10 3 | 0 | | | 369 | 34 9 |
| Panama | 10 XII | 1950 | 128 [b] | 15 9 | 0 | | | 290 | 36 0 |
| Paraguay | 28 X | 1950 | 207 [b] | 15 6 | 0 | | | 460 | 34 6 |
| | | | 219 [c] | 16 5 | | | | | |
| Venezuela | 26 XI | 1950 | 495 [b] | 9 8 | 2 | 341 | 6 8 | 2,709 | 53 8 |
| | | | 694 [c] | 13 8 | | | | | |
| Puerto Rico | 1 IV | 1950 | 225 [b] | 10.2 | 1 | 132 | 6 0 | 895 | 40 5 |

lation of 2 000 but also defines as urban places of 1 500 and over if running water service is provided in the houses. For further details see *United Nations Demographic Yearbook* 1955 (United Nations publication, Sales No 1955 XIII 6) Table 7

[b] City proper

[c] Urban agglomeration.

[d] Including seven cities that are within the urban agglomeration of Greater Buenos Aires

[e] Excluding seven cities that are within the urban agglomeration of Greater Buenos Aires.

[f] Population actually enumerated, excluding 10 per cent estimate for under-enumeration.

America probably to a greater extent than it would in *other regions*. Even very small towns that are capitals of administrative units are likely to have certain typically urban facilities, along with diversified occupations, and, above all, a conviction that they are urban and different from peasant villages [8]. If the *definition of* "urban" is restricted to large towns with 20,000 or more inhabitants, none of the Latin American countries was predominantly urban about 1950, the percentages in the four most urbanized countries (excluding Uruguay) were Argentina, 48, Chile, 40, Cuba, 33, and Venezuela, 31.

In many of the Latin American countries one third or more of the urban population is concentrated in a single large city which, with one or two exceptions, is also the national capital. Save in Brazil and Colombia, the largest city outstrips the combined populations of all other cities with 100,000 or more people. Table 2, which gives the most recent population estimates for some of the largest "urban agglomerations" (city proper plus suburbs), throws additional light on the picture of urban concentration. In five countries, the largest urban agglomeration contains more than 20 per cent of the national population, with the percentages reaching 44.0 in Uruguay and 29.4 in Argentina. In ten other countries the largest city or agglomeration contains more than ten per cent of the national population.

[8] For a description of the self-conscious urban outlook that may be found in small and isolated Latin American towns, see Marvin Harris, *Town and Country in Brazil* (New York, Columbia University Press, 1956).

*Table 2*

ESTIMATED POPULATIONS OF SOME URBAN AGGLOMERATIONS AND METROPOLITAN AREAS IN LATIN AMERICA [a]

| *Urban agglomeration* | *Population in thousands and date* | *Percentage of national population* |
|---|---|---|
| Greater Buenos Aires, Argentina | 5 617 (1955) | 29 4 |
| Rio de Janeiro, Brazil | 3 625 (1955) | 6 2 |
| São Paulo, Brazil | 3 325 (1955) | 5 7 |
| Bogotá, Colombia | 1,000 (1954) [b] | 8 1 |
| Mexico, D F | 3,700 (1955) | 12.5 |
| Panama, Panama | 205 (1955) | 22.6 |
| Lima, Peru | *950 (1955)* | *10 1* |
| Ciudad Trujillo, Dom Rep | 255 (1955) | 10 6 |
| Montevideo, Uruguay [c] | 1,150 (1955) | 44 0 |
| Caracas, Venezuela | 1,000 (1955) | 17 3 |

[a] ... *Planeamiento*, Unión Panamericana, 21 22, ... le to those ... he "urban ...

[b] ... th an area ... The 1954 ...

[c] City proper

*Table 3*

INCREASES IN DIFFERENT SECTORS OF THE POPULATIONS OF SELECTED COUNTRIES BETWEEN THE TWO MOST RECENT CENSUSES

*(In thousands)*

| *Country* | *Date of census* | *Population of cities 100 000 and over at date of most recent census* | *Average annual percentage increase* [a] | *Remainder of urban population* | *Average annual percentage increase* [a] | *Rural population* | *Average annual percentage increase* [a] | *Total population* | *Average annual percentage increase* [a] |
|---|---|---|---|---|---|---|---|---|---|
| Brazil | 1 IX-40 | 4 512 | | 8,368 | | 28,356 | | 41 165 | |
| | 1 VII 50 | 6 872 | 5 3 | 11 911 | 4 5 | 33 162 | 1 7 | 51,942 | 2 7 |
| Chile | 28 XI-40 | 1,248 | | 1 391 | | 2,384 | | 5 024 | |
| | 24-IV 52 | 1,689 | 3 1 | 1 884 | 3 5 | 2 360 | —0 1 | 5 933 | 1 6 |
| Colombia | 5-VII 38 | 879 | | 1 655 | | 6 168 | | 8 702 | |
| | 9 V 51 | 2 052 | 10 5 | 2,135 | 2 3 | 7,358 | 1 5 | 11,548 | 2 5 |
| Cuba | 25-VII-43 | 984 | | 1 623 | | 2,171 | | 4 779 | |
| | 28-I 53 | 1 277 | 3 1 | 2 048 | 2 8- | 2 504 | 1 6 | 5 829 | 2 3 |
| Dominican Republic | 13-V 35 | 70 | | 197 | | 1 213 | | 1,479 | |
| | 6-VIII 50 | 182 | 10 5 | 326 | 4 3 | 1,627 | 2 2 | 2 136 | 2 9 |
| Mexico | 6-III-40 | 2,477 | | 4 419 | | 12 757 | | 19 654 | |
| | 6-VI 50 | 3 899 | 5 7 | 7 084 | 5 9 | 14 808 | 1 6 | 25 791 | 3 1 |
| Panama [b] | 8 IX-40 | 112 | | 99 | | 412 | | 623 | |
| | 10-XII 50 | 128 | 1 4 | 162 | 6.2 | 516 | 2.5 | 806 | 2 9 |
| Puerto Rico | 1 IV-40 | 189 | | 378 | | 1 303 | | 1,869 | |
| | 1 IV 50 | 357 | 8 9 | 538 | 4.2 | 1,316 | 0 1 | 2 211 | 1 8 |
| Venezuela | 7 XII-41 | 436 | | 1,068 | | 2,347 | | 3 851 | |
| | 26-XI 50 | 836 | 10 4 | 1,873 | 8.5 | 2,325 | —0 1 | 5 035 | 3.5 |

[a] This is not the average geometric rate of increase, but a rate obtained by dividing the *total percentage increase* over the intercensal period by the number of intervening years.

[b] Excluding Canal Zone, tribal Indian population included in rural population and total population.

Table 3 shows that urban areas are growing much faster than rural areas in Latin America as a whole [10] During the decade 1945 55, the average rate of natural increase of the rural population represented about 2 6 per cent each year, but the actual rate of growth of the rural population was only about 1 6 per cent per year, because of cityward migration [11] In Argentina, Chile, Puerto Rico, Uruguay and Venezuela—five out of the six most highly urbanized countries of the region—the rural population is now stationary or declining In the others, and particularly in the three largest countries, Brazil, Colombia and Mexico, the rural population is still expanding in spite of the urbanization process, and the potential for continued cityward migration is correspondingly large

Table 3 also indicates that cities of 100,000 or more are continuing to grow somewhat more rapidly than the urban population as a whole, but the available statistics show wide variations in the extent to which this is true The statistics probably understate the rate of growth of the largest cities, particularly the capital cities, since many of these have outgrown their boundaries and their most rapid expansion is now taking place in suburbs The population of the Federal District surrounding Mexico City, for example, increased from 309,000 in 1940 to 815,000 in 1950, or by about 16 per cent annually, while the city proper grew by 5 3 per cent each year In Argentina, however, between 1914 and 1947 the population of the urban agglomeration of Greater Buenos Aires increased slightly less than the urban population as a whole (132 per cent compared to 138 per cent) [12]

In Brazil and Colombia in particular, several cities (mainly provincial capitals) are growing more rapidly than the national capital Several other countries also have medium size industrial centres of rapid growth (Concepcion in Chile, Monterrey in Mexico) In general, however there is believed to be a continuing excessive concentration of urban development in a few centres in each country The scarcity of medium size cities, which might act as local economic and cultural centres, has often been cited as one of the more unfavourable aspects of Latin American urbanization [13]

The increases in city population come from three sources natural increase (excess of births over deaths), migration from abroad, and internal migration (from the smaller towns and the countryside)

The rate of natural increase in most Latin American cities appears to be fairly high Young adults form a much larger proportion of the population in the cities than in the countryside, partly because of differential immigration of young adults, and unlike the situation in most other regions of rapid urbanization, women are in the majority Even if the actual fertility rates of urban women are lower than those found in the countryside,[14] a population with the type of age and sex distribution found at present in the cities is likely to have a high birth rate and, since there are relatively few old people, a low death rate Furthermore, and in spite of the poor living conditions that will be described later, medical and sanitary facilities are improving and contributing to lower death rates and longer life expectancy

Migration from abroad, mainly from Europe, has in the more distant past been the major source of population growth for some of the largest cities, particularly Buenos Aires, Rio de Janeiro, São Paulo and Montevideo Between 1930 and 1946, however, immigration from overseas dwindled to a trickle Although immigration to Argentina and Brazil was resumed on a fairly large scale from 1947 to 1952, Venezuela (which before the Second World War received very few immigrants) is the only country in which overseas immigrants have in recent years made a major contribution to city growth

In the larger cities, it appears from inter censal data that one half to four fifths of the increases in population are directly owing to internal migration The migrants who are mainly young adults, at the same time contribute heavily to the natural increase of the city populations

In most countries of Latin America, there is in addition to cityward migration a current of migration to areas where unoccupied lands are available for settlement, information on this latter trend is scanty, but the predominance of males among migrants to rural areas and of females among migrants to the cities seems to be common

## Rural-urban migration in the larger Latin American countries

*Argentina* is the most highly urbanized country of Latin America (with the possible exception of Uruguay, on which there is no recent census based demographic information) Until the 1930 s, the population of the larger Argentine cities consisted mainly of European

[10] The rate of increase of the rural population, in relation to the urban population is perhaps understated in some countries, owing to the fact that rural communities which grow sufficiently between censuses to pass the official dividing line between " rural " and " urban " or which become capitals of newly-created districts, have their populations subtracted from the rural total and added to the urban total in the inter-censal comparisons

[11] According to estimates prepared for the forthcoming *Manpower Survey of Latin America* to be published by the Economic Commission for Latin America

[12] Gino Germani, *Estructura Social de la Argentina* (Buenos Aires 1956) p 71

[13] [illegible]

[14] In Brazil, during the period 1940/50, the average annual [illegible] d 15-49 was 120 9 in [illegible] 201 9 in rural zones [illegible] In Mexico in 1950, [illegible] er 1 000 women aged 15-49 was 505 in urban *municipios* with 50 000 or more inhabitants and 683 in rural *municipios* (Robert G Burnight, Nathan L Whetten and Bruce D Waxman " Differential Rural Urban Fertility in Mexico ", *American Sociological Review* vol 21, No 1, February 1956, pp 4-8)

migrants[15] Between that period and 1947, European migration was replaced as a source of city growth by a massive influx of internal migrants During the four years 1943-1947, about 900,000 to 1,000,000 persons, or 20 per cent of the 1943 rural population, are estimated to have moved into urban areas During the same period, Greater Buenos Aires gained about 750,000 inhabitants, nearly 600,000 of them internal migrants, and by 1947 it contained 29 per cent of the national population[16] Most of the migrants to Buenos Aires and other large cities, however, probably did not come directly from rural environments According to a recent official estimate, "a high percentage—perhaps more than 90 per cent—of the population that migrates to the big cities comes from populated centres with more than 2,000 inhabitants and from the small cities (generally from their suburbs or outskirts), which means that they adapt themselves very soon to the environment of the large cities Consequently, they are distinguished neither by occupation nor by residence from the rest of the city working class"[17] Presumably the migrants from smaller towns are replaced by migrants from rural areas, this staging process, together with the lack of any sharp ethnic or cultural contrasts between rural and urban Argentines, serves to make adjustments rather easier than elsewhere

In Argentina, to a greater extent than in the rest of Latin America, urban growth has derived from industrial expansion During the period 1937-1947, the number of persons employed in industry increased annually by 42,000, while the number of persons entering the total labour force each year was only about 40,000 Although the rate of industrial expansion, and probably the rate of cityward migration, have declined since 1947, there has been practically no urban unemployment or underemployment, and good opportunities for upward social mobility[18]

In *Brazil*, city growth has been impressive both in absolute terms and in rate The 158 "urban agglomerations" with 5,000 or more inhabitants in 1940 increased by 3 844,000 (43 6 per cent) by 1950 Of this increase,

72 5 per cent of this increase came from migration Brazil, however, as table 1 indicates, remains the least urbanized among the large Latin American countries. According to some authorities, the real rural predominance is much greater than the 63 8 per cent indicated by census criteria

> "Even though there are thousands of towns scattered about the immense territory, still four-fifths of the population is strictly rural In the United States, one out of every two children born on the farm later migrates to an urban area In Brazil, the proportion is very much lower, probably not more than one in ten or fifteen"[21]

The 1950 census figures indicate strong migratory currents from the poorer and more predominantly rural States of the north-east and east toward the south and south-west, where the larger and more rapidly growing cities are found (There is little information on the importance of migration within State boundaries or on the proportion of migrants who are strictly rural in origin) A good deal of the internal migration appears to take place by steps, from the countryside to the smaller cities and towns, and from these to the larger cities The small semi-urban towns (2,000-5,000 people) are believed to have lost more to the larger centres than they have gained from the countryside[22]

There is another respect in which Brazilian internal migration takes place by steps Many of the migrants to the larger cities in the south come from rural areas within the same region, areas of coffee plantations or

migrants from the north-east (often driven from their homes by drought) who come from a much more isolated and economically backward environment In Brazil as a whole, with its vast interior now being penetrated by roads and railroads and its unusually mobile rural population, it appears that migration from one rural area to another is on a larger scale than migration from rural areas to the cities It also appears that migrants to the cities are, in general, drawn from groups who are closer to urban ways of life than the average rural Brazilian A recent study of migrants from the north-

cultural wage rates are relatively high, or for the newly opened areas of land settlement in south-western Brazil[23] A 1942 study of migrant families in the city of São Paulo with children in school (not necessarily representative of all migrant families) found that the greater number came from within São Paulo State, 51 1 per cent came

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72 per cent of the Aires were foreign group were foreign- *ura de la Población*

sociales de los cam *sos y Conferencias*, n *Ciencias Sociales*, 952, pp 147 158

[17] Communication from the Ministerio de Trabajo y Previsión, Buenos Aires, 24 August 1956

[18] *Ibid*

[19] "As Migrações Interiores no Brasil *Revista Brasileira de Estatística*, vol XV, No 58 April June 1954

[20] Instituto Brasileira de Geográfia e Estatística, *Documentos Censitários*, Serie C Numero 14, Nota no 268

[21] T Lynn Smith, *Brazil People and Institutions*, Rev Ed

pp 111-130

to the city from other urban areas and 48 9 per cent from rural areas[24] The authors believe, however, that many of the families classified as urban were really of ultimate rural origin and spent only a short time in a smaller town before coming to São Paulo Only about 40 per cent of the heads of families had been previously engaged in agricultural occupations, mainly as wage labourers, the other heads of families had practised a wide variety of trades

the urban population increased by 900,000, 350,000 of this increase went to Santiago and its suburbs City growth has been slower than in many of the other countries, however, since the rate of increase of the Chilean population is relatively low While direct evidence is lacking, Chilean authorities believe that the migration is largely by steps (as in Brazil) A recent inquiry in one rural community indicates a high degree of readiness for future migration, 22 6 per cent of the families questioned stated that they planned to move within the next year, and 76 per cent of these planned to move to an urban area[25]

In *Colombia*, the capital (Bogota) is more than twice as large as the second city, Medellín, but a number of regional centres are growing more rapidly than the capital and are more identified with industrial development

Since 1945, job opportunities provided by industrial expansion and urban construction have provided a strong positive incentive for cityward migration, while conditions in the countryside have at the same time

cropping tenure, and the eviction of tenants by landowners following a 1936 agrarian reform law which gave certain advantages to tenants and caused owners to fear that tenants would claim title to the dwelling house and land they occupied[26] In 1948-1953 acute political disturbances and military operations in the countryside also caused many peasants to leave their villages and move to towns[27]

Two studies of rural communities in the central highlands of Colombia show that migration, mainly of young unmarried adults, has for some years kept the community populations stationary or declining in spite of high rates of natural increase The majority of migrants going to cities, in particular to Bogotá, were women, many of whom sought work as domestic servants, while the majority of migrants to rural areas outside their native communities were male[28]

In *Cuba* the difference between the rate of growth of the cities and that of the rural population is smaller than in other Latin America countries About 52 per cent of the population was classified as urban in 1931, 53 per cent in 1943 and 57 per cent in 1953 Between 1931 and 1953, the urban nucleus of Havana grew more slowly than the national population, although this was probably offset by the growth of suburbs Owing to the importance of seasonal wage labour in the sugar industry, the sociological and occupational distinctions between "urban" and 'rural" are less clear-cut in Cuba than elsewhere in Latin America "Although the Cuban economy is primarily agricultural, more than 60 per cent of the labour force lives in urban zones

The agricultural workers move to the city in an effort to obtain other work during the dead season The fully developed transport facilities and the geographical configuration of the island of Cuba greatly facilitate such a movement "[29]

In *Mexico*, shortages of cultivable land are acute, and the rate of natural increase of the rural population is very high The fact that the urban population is growing nearly four times as rapidly as the rural indicates considerable migration to the cities According to a recent official statement, however, while "there is no doubt that there has been an increase in the migration of labour from rural to urban areas in some regions,

the extent of this movement is not known There are likewise no data on how many persons have migrated from the country or moved from an urban to a rural area "[30] Census data, limited to inter state population movements, show a massive migration into the Federal District (consisting mainly of Mexico City and its suburbs) According to one calculation, the Federal District gained from internal migration during the period 1940 1949 about 845 000 persons—amounting to 28 per cent of its 1950 population and about 70 per cent of the total inter state population movement[31] Migration to the smaller cities cannot be calculated, since much of it is intra state

It is probable that the poorer and more characteristically rural people of Mexico, particularly those retaining Indian culture traits, do not migrate directly to the large cities in important numbers According to one authority, the few migrants to the cities who are identifiably of

[24] Vicente Unzer de Almeida and Octavio Teixeira Mendes Sobrinho, *Migracão Rural Urbana* (Secretaria da Agricultura do Estado de São Paulo 1951)

[25] Communication from the Instituto de Investigaciones Sociológicas, Universidad de Chile 19 March 1956

[26] United Nations, *Analyses and Projections of Economic Development, III The Economic Development of Colombia* (E/CN 12/365/Add 1) p 164

[27] *Ibid.* (E/CN 12/365), p 127

[28] T Lynn Smith and others, *Tabio a Study in Rural Social Organization* (Washington D C Office of Foreign Agricultural Relations 1945) and Orlando Fals Borda *Peasant Society in the Colombian Andes A Sociological Study of Saucio* (Gainesville University of Florida Press 1955)

[29] Cuba *Censos de Población Viviendas y Electoral, Enero 28 de 1953 Informe General* (La Habana, 1955) p XL.

[30] Government of Mexico reply to United Nations questionnaire on land reform, 9 December 1955

[31] Rene Espinoza Olivera "Movimientos Migratorios Internos de Mexico 1940-1949" in *Proceedings of the World Population Conference 1954* Papers (United Nations publication, Sales No 1955 XIII 8 (vol II)) p 803 See also Nathan L. Whetten and Robert G Burnight "Internal Migration in Mexico", in *Estudios Antropológicos publicados en homenaje al doctor Manuel Gamio* (Mexico, D F, 1956), pp 537 552.

such origins are mainly women seeking work as domestic servants[31] The men from traditional rural societies often seek temporary jobs in agriculture, large numbers of them migrate for this purpose to the south western part of the United States As in other Latin American countries, many of the migrants to the larger cities, who are of ultimate rural origin, have abandoned on the way their rural characteristics (which frequently include identification as "Indian") "There are no Indians in Mexican factories although there are many persons in various industrial employments who were born in isolated villages, and all of whose relatives are 'Indian'"[33]

In *Peru* there exists one of the more extreme cases of urban growth concentrated in a primate city At the most recent census, in 1940, Lima had 524,000 inhabitants, it has since grown at a rate of about 6 per cent a year, and now has an estimated population of nearly one million Lima has about ten times as many people as the second largest city, Arequipa, it contains about 60 per cent of all the Peruvians living in centres of more than 10,000 inhabitants[34] The rate of natural increase in Lima is reported to be high (about 3 per cent each year) but migrants have probably accounted for more than half of the post 1940 growth of population In 1954, according to official statistics, the excess of persons entering Lima by road over the number leaving was 92,000, this number is probably not too far from the migration figure[35]

A majority of the rural population of Peru are Indians, and it is known that land shortages are forcing increasing numbers of them to leave their homes in search of work As in Mexico, however, there is some disagreement and very little concrete information on the extent to which these Indians are contributing to the population of Lima and other Peruvian cities although many of the inhabitants of the peripheral slums are believed to be Indians A recent observer in Arequipa found a local conviction that the city was menaced by a flood of impoverished Indian migrants, with estimates of their present number ranging from 15 000 to 40,000 but concluded that their actual number was smaller and their employment situation somewhat better than was locally believed[36]

Migration by Andean Indians in Peru (as well as in neighbouring countries) appears to differ from most movements of internal migration in Latin America and to resemble migration in Africa in its predominantly male and temporary character The men go to look for work for a few months between the seasons of sowing and harvest in their villages They are said to be surprisingly well informed of distant job opportunities by word of mouth, in spite of the isolation of their homes They travel by truck or on foot, carrying their own food (dried potatoes or grain), and return with most of their earnings They themselves recognize the severe privations that they endure to save the greatest possible amount of money, they eat badly and insufficiently" and often live in flimsy shelters near their place of employment[37] Some Indian migrants undoubtedly remain permanently in the cities, "Indian" status in Latin America, however, is determined by language, costume, and culture, rather than by physical traits, once the migrants have learned to speak Spanish and adopted urban dress they are no longer considered "Indians"

A 1952 study of 1,000 migrant workers who had lived in Lima for at least five years and were affiliated with the national social insurance agency showed that they were well above the average Peruvian in terms of literacy and schooling, and had not been, in the main forced to migrate from pressure of poverty in their previous circumstances[38] It is not clear whether these results are typical of migrants to Lima or reflect the particular situation of a more favoured group achieving employment covered by the national insurance agency

There is some evidence that small landowners are more likely to migrate to cities than tenants who receive a plot of land in exchange for labour The former can leave their family to work their land The latter must migrate with their family if at all, since the family would be evicted if the head were not present to pay for his land through labour According to another source, the fact that migrants commonly "retain legal title to their meagre holdings" has the result that "their leaving contributes nothing to the problem of excessively small divisions"[39]

In *Venezuela*, city growth has been stimulated by national prosperity resulting from expansion of petroleum exports, since 1941, both the *per capita* national income and the rate of urbanization have been the highest in Latin America Maracaibo, the principal centre of the petroleum producing district, has grown rapidly along with some other medium size cities, but the major urban growth has taken place in the capital, Caracas The Government's increased revenues have permitted it to expand urban social services and undertake a large-scale construction programme in the capital Private prosperity has also stimulated construction and the expansion of the service occupations The rural areas and the small towns of the interior have had little share in the prosperity, except through a vigorous road building programme, the gap between rural and urban incomes has widened

The population of the metropolitan area of Caracas

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[32] Communication from Dr Lucio Mendieta y Nuñez Instituto de Investigaciones Sociológicas 5 March 1956

[33] Wilbert E Moore *Industrialization and Labor Social Aspects of Economic Development* (Ithaca, Cornell University Press 1951)

[34] John P Cole "Geografía Urbana del Perú", *Revista del Museo Nacional* Lima No XXIV, 1955 pp 50-80

[35] Communication from Señora Marina Cordova Molla, Jefe del Departamento de Servicio Social y Vivienda, Fondo Nacional de Salud y Bienestar Social Lima 14 March 1956

[36] Alfred Metraux, "Las Migraciones Internas de los Indios Aymará en el Perú Contemporáneo" in *Estudios Antropológicos publicados en homenaje al doctor Manuel Gamio* (Mexico D F., 1956) pp 391-408 Dr Metraux also emphasizes the present lack of, and need for sociological studies of adaptation of Sierra Indians to the urban environment.

[37] *Ibid.*

[38] Señora Marina Cordova Molla, op cit.

[39] Thomas R. Ford, *Man and Land in Peru* (Gainesville 33 of Florida Press, 1955)

increased from 354,000 at the end of 1941 to 694,000 at the end of 1950, by the end of 1955 it is estimated to have reached one million During the 1941-1950 period, it has been calculated that natural increase accounted for 32 5 per cent of this population growth, internal migration for 44 2 per cent, and immigration from abroad for 23 3 per cent Since 1950, the flow of migrants from abroad has increased, and has become slightly more important than internal migration [40]

All twenty of the Venezuelan States have contributed appreciable numbers of migrants, irrespective of their density of population or their distance from the capital The Andean region of Western Venezuela, however, has attracted particular attention as a source of migration The Andean States are more densely populated and more predominantly rural than most other States of Venezuela According to a recent study of the region, while direct information on the currents and motives of migration are lacking, demographic data indicate that "the rural population is diminishing in the majority of the Andean municipalities, as it moves to the larger towns and cities of the region, to the low or tropical lands bordering the Andes, or to the oil fields, urban centres, and agricultural zones of distant regions of the country" [41] The same study suggests that the rural population of the region is still excessive, and that continuing migration—although not necessarily to cities outside the region—is desirable A high proportion of the landholdings are now too small to provide their owners with an acceptable level of living, even if technological improvements were applied, and nearly 60 per cent of the rural workers own no land at all It is estimated that the creation of economic farming units would require a reduction in number of the present 66 000 farms by about 18,000, and that other means of livelihood should be found for about 100,000 people (as well as for an annual natural increase of about 3 per cent) According to another study,[42] in almost all of the region, the people complain that lands are inadequate and exhausted that the prices of agricultural products in the local markets are very low"

Information on city growth is quite inadequate for most of the smaller countries of the region With the exceptions of Puerto Rico and Uruguay, the present percentage of urban population and the rate of urbanization appear to be lower in the small than in the large countries In most of the small countries, the development of industry is very limited and urban growth derives mainly from the older causes mentioned above In *Bolivia*, there has in the past been considerable migration of rural Indians to La Paz and other cities and mining centres, but since 1952 it is reported that this trend has been halted or reversed because of economic crises and lack of job opportunities in the cities, together with land reform in the countryside [43] In *Ecuador*, according to a recent study, "in the absence of precise data and figures, a solid, large-scale migration from the country into the cities is hard to establish" There is some evidence that rates of natural increase may be higher in the urban than in the [illegible]
whites [illegible]
Indians [illegible]
that the fast growth of cities in Ecuador is by no means solely a matter of urbanward migration The data which first suggested this bold and thinly based hypothesis do not suffice for its elaboration" [44]

In *Paraguay* and in the countries of the Caribbean and Central America, various observers have reported rural migration to the towns, and the development of improvised slums populated by rural migrants, but it is not clear whether such migration is a major factor in city growth In *Puerto Rico*, with its unusually dense rural population and its ties with the United States, there is a high rate of migration from the countryside into the towns Between 1940 and 1950 the urban population increased by 58 per cent and the rural population by one per cent In Puerto Rico, however, there is also an important current of migration from the towns to New York and other cities in the United States

### *Conclusions regarding rural-urban migration*

It is clear that the existing information on rural urban migration in Latin America does not permit any confident generalizations as to where the rapidly growing city populations come from or why the migrants move The following conclusions, however, seem reasonable

1 The migratory process is not simply a movement of peasants and farm labourers from a completely rural setting to the big cities, and the migrants are not, in the main, the poorest or least able to make a living in their places of origin (although such persons are well represented) The migrants include representatives of various social strata from the small towns as well as the countryside, and many of the people of rural origin who ultimately go to the cities first spend some time in the smaller towns, or migrate to work in mines or plantations A considerable number gain some experience of urban ways of life, and often learn to read and write, during their term of compulsory military service Many of the migrants are artisans or semi skilled workers (particularly masons or other building trades workers) Some of them are young people who have gone through secondary school and hope to continue their education at a city university, or to obtain bureaucratic or white collar jobs There is probably a rough self-selective process The small town or rural non agricultural worker or artisan is more likely to migrate than the cultivator who possesses no skill usable in the city

[40] [illegible]

[41] Venezuela Consejo de Bienestar Rural *Problemas Económicos y Sociales de los Andes Venezolanos Parte I* (Caracas [1956]) p 66.

[42] Unión Panamericana *Causas y Efectos del Exodo Rural en Venezuela* (Washington, D C., [1955])

[43] Alfred Metraux op cit

[44] Beate R Salz *The Human Element in Industrialization a Hypothetical Case Study of Ecuadorean Indians* American Anthropological Association, Memoir No 85, December 1955

The literate or semi-literate are more likely to migrate than the illiterate The man with relatives or acquaintances in the city is more likely to migrate than the man with none

2 Some commentators on urbanization in Latin America have suggested that it is resulting in rural depopulation, shortages of agricultural labour, and inadequate food production Such effects are found locally, but they do not seem to be widely characteristic In most of the countries, the rural population is still in the majority and is increasing in numbers, although more slowly than the urban population Rural over-*population, fragmentation of land holdings, and under*-employment are characteristic of many areas Migration may help to remedy these problems and stimulate large landowners to use their labour more efficiently If rural *per capita* production were increasing satisfactorily, a stationary or declining rural population would be no cause for alarm Where there is actual rural depopulation to any significant extent, as in Uruguay, the Andean States of Venezuela and some of the older cultivated areas of São Paulo, soil deterioration, the land tenure system or the extremely low wages and poor living conditions of rural labourers are likely to be more responsible for it than the lure of the city

3 While quantitative depopulation of the countryside does not seem to be a widespread danger, there is a more serious danger of qualitative depopulation, owing to the selective character of migration the young adults, the ambitious, the literate move to the cities, leaving the countryside to stagnate

4 Cityward migration is not the only important form of internal migration in Latin America In most of the countries, migrants are also moving into new agricultural regions—usually tropical lowlands now being opened for settlement through road building and the conquest of malaria and other diseases In Brazil, this current may be larger than that flowing to the cities, and in Bolivia, Colombia, Costa Rica, Mexico, Peru, and Venezuela it is increasing Many of the rural migrants who would be least adaptable to city life—the Brazilians of the drought stricken north-east, the Andean and Middle American Indians—are probably moving to new settlement areas to a greater extent than to the cities There is some differentiation between the sexes in the two currents of migration The majority of migrants to the cities are women and the majority of migrants to the new agricultural areas are men, but the difference does not appear large enough to create social problems as serious as those found in parts of Africa and Asia, where there is a striking excess of males over females in the cities

## EMPLOYMENT[45]

A few Latin *American cities* are highly industrialized, but in most of them the percentage of people working in factories is exceedingly low when compared with the ratios that are generally considered necessary for the balanced development of urban communities In 1950, according to estimates made by the Secretariat of the Economic Commission for Latin America, the percentage relationship of employment in manufacturing industry proper (excluding handicrafts and small workshops) to total urban population was 8 1 in Argentina (the most highly industrialized country), 6 7 in Uruguay, 6 6 in Brazil, 5 5 in Chile, and 4 9 in Mexico, in most of the other countries the relationship was between 3 and 5 per cent, Nicaragua having the lowest percentage (2 1) The percentage employed in manufacturing was, of course, much higher in the large industrial cities, in São Paulo, for example, the manufacturing labour force in establishments with five or more workers represents 15 per cent of the city population

Furthermore, while factory employment increased more rapidly than city population in Latin America as a whole during the period 1945-1950, rising from an estimated 5 2 per cent of the urban population to 5 7, this has not been generally true since 1950, 1955 employment in manufacturing industry proper is estimated at 5 6 per cent of the total urban population

In the cities of rapid industrial growth, observers have reported considerable occupational and social mobility, the labourers already in industry and their children move into more skilled occupations and into the middle class, while being constantly replaced in the less skilled jobs by migrants and by recruits from the declining home-craft and artisan occupations[46] In Latin America in general, however, the most rapid increases in urban employment have been in the " services " and " construction " categories, which include a good deal of marginal labour of very low productivity, while the group employed in " activities not defined ", consisting mainly of marginal and underemployed persons, has kept pace with city growth[47]

Except in the most industrialized cities, the migrants are more likely to enter into these latter occupational categories than into factory employment At the same time, a mushroom expansion has been reported of " dwarf industry " small inefficient workshops, depending for profitable operation on the cheap labour of migrants or of the already existing urban marginal population Not much is known about these dwarf industries—which are said to escape almost all statistics and most regulations—but they appear to compensate in the urban employment picture for a decline in traditional home-

[45] For a detailed discussion of recent employment trends see " Changes in employment structure in Latin America during the decade 1945 55 ", *Economic Bulletin for Latin America*, vol II, No 1, 1957 See also, International Labour Office, *Report of the Director-General*, Report I, Sixth Conference of American States Members of the International Labour Organisation, Havana, September 1956 (Geneva, 1956)

[46] Gino Germani, " Algunas repercusiones sociales . "

crafts, and may be expanding more rapidly than factory industry proper

In Colombia, between 1945 and 1953, the percentage of the active population engaged in what is classified as "artisan industry" increased from 7 3 to 8 5, while the percentage in manufacturing increased from 5 2 to 6 4 The estimated gross product per active person in artisan industry was even lower than that in agriculture only 806 pesos in 1953, compared with 1,232 pesos for agriculture, and 4,829 pesos for manufacturing [48] Nothing further is known about the characteristics of the persons engaged in artisan industry, but in view of the considerable displacement of population from the countryside to the towns during this period it seems probable that many of them are underemployed migrants, not yet absorbed into more productive occupations

There is also very little information on the numbers and origins of the petty traders, street pedlars, lottery-ticket sellers, porters, shoe shiners, and other persons with indefinite or makeshift occupations in the Latin American cities Not all of these are underemployed or worse off than wage labourers, but it is probable that most of them are at the lowest urban income level and that many persons drift into such occupations through inability to find steadier and better paid employment A few studies of occupant built slum neighbourhoods have found a high proportion of the residents to be engaged in such occupations, but in these cases the slum population was drawn mainly from the long established urban lower classes, and the extent to which rural migrants adopt these means of livelihood is unknown

Among the women who come to the cities domestic service is the leading initial occupation The flow of girls from the countryside, prepared to work for very low wages, makes it possible for middle class families even with modest incomes to employ servants and it is traditional for them to do so (This abundance of servants, of course, is disappearing in the cities in which light industries now offer better paid employment)

One of the most common initial occupations among the male migrants is construction work—paradoxically, in view of the extremely bad housing in which they live themselves Many of the larger cities are now being stimulated by high business profits and a continuing cur- [illegible]

[illegible] "Indians" (and therefore of recent migratory origins from the countryside) are said to be in the building trades [49] In Rio de Janeiro, "the construction industry attracts the great mass of the migrants The fact that the builders permit these workers to live in the skeletons of the buildings during construction gives the phenomenon a very distinctive character" [50] In Mexico City, the construction industry "has motivated a large scale movement of workers from the countryside, owing to the fact that a large part of the activities in construction do not require skilled labour" [51] In Montevideo, "in recent years construction has absorbed a large number of labourers, and it is more than probable that a high proportion of the migrants have obtained jobs of this kind" [52]

Numerous migrants appear to have some building trades experience when they come to the cities, they include stone-masons, carpenters, and brick-layers, but their limited skills are not well adapted to modern urban construction, and their work habits are irregular, resulting in rather low *per capita* output in the building industry [53] It is reported from Brazil that the migrant construction workers tend to move into the better paid and steadier industrial jobs as they become adjusted to city life [54] The women also probably move from domestic service to jobs in light industry, to the extent that such jobs are available There is no direct evidence, however, on the extent of such an occupational movement

One of the major barriers to industrial expansion, in Latin America as in other regions now undergoing rapid urbanization, is the lack of an adequate supply of qualified foremen and skilled labourers to complement the [illegible] workers from the [illegible]

abroad, but a considerable increase in apprenticeship and vocational training is also needed, and vocational training is hampered by the workers' limited formal education "Perhaps the most pervasive social obstacle to higher productivity is the low level of education of most workers and even of foremen and supervisory staff, and inadequacy of vocational training facilities An ILO productivity expert in Brazil found that even in a relatively advanced industrial area such as the State of São Paulo, a majority of the workers had had only two or three years of formal education" [55]

Another obstacle, often cited but hard to evaluate, is a spirit of apathy and resignation among certain migrants who have been unable to adapt themselves to industrial work A recent report from Uruguay refers to "a group that aptly call themselves the 'changas' (odd job) men There are many of these They take whatever work comes along, spend a little time at it, and go on to do a series of different jobs They are always tired after a short time, because they have a very limited education and absolutely no knowledge of the work they

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[48] United Nations, *Analyses and Projections of Economic Development III Colombia* (E/CN 12/365), pp 55 and 74

[49] Joseph A. Cavanaugh, *Características Socio-Demográficas de Lima, Perú* (Lima Instituto de Asuntos Inter Americanos, 1955)

[50] Communication from Dr L. A. Costa Pinto, 21 March 1956

[51] Mexico, Banco Nacional Hipotecario Urbano y de Obras Públicas *El Problema de la Habitación en la Ciudad de México*, Estudios No 6 (Mexico, D F, 1952)

[52] Communication from Señora Valentina Maidagán de Ugarte Montevideo 12 March 1956.

[53] Communication from Dr Hernán Romero Universidad de Chile, 28 March 1956

[54] Communication from Dr L A Costa Pinto, 21 March 1956.

[55] International Labour Office, *The Role of Employers and Workers in Programmes to Raise Productivity* Report II, Sixth Conference of American States Members of the International Labour Organisation, Havana, September 1956 (Geneva 1956), p 11

are doing, so in spite of the goodwill they had in the beginning they fail, and eventually they lose their geniality Many of these workers are people who have come from the country, hoping to find work in new factories After they arrive, they realize that even for this they need some preparation They accept these very temporary jobs and seem to lose all chance to ever become steady workers Many of the suburban areas are made up of these people who live there with their families The improvement of their status, or at least of that of their children so that they may become efficient industrial workers, is one of the most difficult tasks ahead [56]

Open unemployment is not a serious problem in most of the Latin American countries, either among the permanent city population or the migrants [57] However, as indicated above, with the probable exceptions of Argentina and southern Brazil, the growth of the cities "has multiplied considerably the unsalaried sector of the urban lower class poor artisans, shop keepers on a small scale or with semi permanent places of business, ambulatory pedlars and workers many of whom have occupations that constitute incredibly poorly paid forms of underemployment " [58] As in other less developed regions, there has been a transfer of rural underemployment to the cities, where it may be statistically concealed under " services " or " activities not defined "

## Social security and labour protection

Latin American legislative provisions for social security and labour protection match those of countries at the most advanced stages of economic development With the partial exceptions of Argentina, Chile, Cuba, and Uruguay, however, such measures are effective mainly in the larger industrial and mining establishments and among some other types of regularly employed urban workers (e g, transport workers) and white collar employees Most of the social security schemes depend on contributory insurance, and thus can be applied only with great difficulty, if at all, to the more marginal workers, who are irregularly employed, poorly paid, and often ignorant of their legal rights Casual labourers, domestic servants, and self-employed artisans and petty traders are usually not covered by the social security provisions The small workshops are often unwilling or unable to keep records and pay insurance contributions The same workshops are likely to evade minimum wage laws and other labour protective legislation

In Mexico in 1954, to take one example, the total number of persons entitled to social security benefits (medical services, and invalidity, sickness and maternity payments) was 992,000, including family members of insured workers, out of a national population of 28 8 millions, of the persons covered, 651,000 lived in the Federal District Piece workers at home, casual and temporary workers, as well as petty traders, pedlars and servants, were not included The majority of workers in the construction industry, which employs a large number of recent male migrants, were classified as temporary workers and were not covered by social security [59] The protection of labour legislation and social security gives regularly employed urban workers in Latin America an important advantage over the rural, but it is probable that, except in the most highly industrialized cities, few migrants enter occupations conferring such advantages until some time after their arrival in the city [60] In fact, labour legislation, by making dismissals expensive and difficult and by fixing minimum wages that assume a fairly high productivity on the part of the worker may make established industries more reluctant to hire unskilled migrant labour [61]

During the most difficult period of their adaptation to city life, the migrants are thus likely to receive little help from existing social security systems and labour legislation Social welfare agencies are active in the larger cities, and are increasingly turning their attention to the problems of the newcomers, but their resources are small

## Incomes

Recent studies of trends in real income in Latin America agree on two points

(1) Those workers who have shifted from agricultural and artisan employment in the countryside and the small towns to regular paid employment in the cities [illegible] material

[illegible]

employed or self-employed, who [illegible] these gains and who are living in extreme poverty The shift of workers from occupations with very low incomes to occupations with higher incomes has resulted in a general rise in the average real income in Latin American countries, especially those with appreciable urban industry

In Argentina, for example, even though the migrants to the cities " had access only to the more poorly paid occupations, the urban environment permitted them to enjoy material conditions definitely superior to those of their places of origin " [62] In Brazil, " the levels of living of the [city] workers are still very low, but they have nothing in common with those of the people of the

[illegible] Eighth Inter [illegible]

[illegible] of the [illegible] known exceptions.

[58] José E Iturriaga, *La Estructura Social y Cultural de México* (Mexico, D F., Fondo de Cultura Económica, 1951), p 40

[59] Mexico, Secretaria de Salubridad y Asistencia, *Memoria del Seminario de Organización de la Comunidad para el Bienestar de la Familia y Protección del Nino*, 1954

[60] A survey of two small groups of families mainly of migrant origin in Caracas in 1953, however, found that 43 per cent of those living in occupant built shacks (*ranchos*) and 64 per cent of those in public housing projects were covered by social security Unión Panamericana, *Causas y Efectos del Exodo Rural en Venezuela*

[61] For a discussion of the problem of labour mobility in relation to labour legislation, see International Labour Office *Report of the Director-General*, Report I Sixth Conference [illegible], p 24

[62] Gino Germani, " Algunas repercusiones sociales [illegible] ."

interior The worker in the cities of the South is poorly paid in comparison with the worker of the United States, or even the European worker, but he is paid three or four times as much as the *caboclo* of the interior, and above all, he works every day and is paid every day "[63] 'Those workers who have shifted from agricultural to non-agricultural activities (which has often implied the movement from rural areas into the cities) as well as wage earners who have transferred from handicraft employment and low wage industries into the newer and more highly mechanized industries, such as engineering, chemicals, and steel, have apparently experienced a very considerable increase in real wages, in spite of the inflation' [64]

A 1953 comparison of rural families in the Andean region of Venezuela with two groups of working class families in Caracas found that the rural families had an [illegible] rban [illegible] and [illegible] 720 [illegible] ainly of migrant origin, 74 per cent of those in the slums and 52 per cent of those in the housing projects had lived in Caracas less than eleven years, 30 per cent had come from the Andean region [66]

(2) While changes of employment have improved average levels of income, there has been little or no general improvement in incomes of workers within given fields of employment Thus, in Mexico, "improvements in the standard of living occurred for workers when they moved from the old agricultural lands into the new and expanding agricultural regions or into commerce and industry These changes helped to raise the over all standard of living in Mexico However, no significant improvement was discernible in the real income of farmers in the old areas or in that of industrial workers as a group, although, of course, the number of workers enjoying the higher standards of this group increased considerably [67] In Brazil and Colombia, *per capita* real wages in industry have actually declined to some extent in recent years, in spite of increasing *per capita* production [68]

The distribution of incomes in most Latin American countries is very uneven, and the share taken by profits in relation to salaries and wages has actually been increasing in a number of the countries The flow of migrants to the cities has presumably helped to keep wage rates down A constantly rising cost of living has meant that those groups of the urban population unable to secure wage increases have suffered a lowering of their levels of living In several countries there have been persistent signs of discontent among the established industrial workers—riots in protest against rising food prices or increased street-car fares as well as strikes for higher wages

## General patterns of consumption

Family living inquiries have been carried out in several Latin American cities and throw some light on the consumption patterns of different classes There is practically no direct information, however, on the impact of the urban environment on the consumption patterns of migrants to the cities It is probable that the combination of higher monetary incomes with the new stimuli to spending provided by urban advertising and the wide variety of available goods and forms of recreation results in unstable and unbalanced expenditures In Brazil, for example, it is unlikely that any substantial part of the income increase gained by people moving to the cities was saved, ' because the city environment, the full impact of which, in the form of a more sophisticated and varied spending pattern, is brought to bear on the outsider by example and advertising, led to a rise in consumption This rise, in all probability, absorbed the entire income increase, except for compulsory collective savings in the form of social security contributions [69]

Purchases of manufactured goods—clothing and household articles such as radios, as well as processed foods and bottled beverages—may take part of the increased incomes Housing may be either a very important or a very minor item Rents are generally high, frequently taking a third or more of urban working class income, but those migrants living in improvised shacks spend little or nothing on housing The standards of housing and diet brought to the cities by rural migrants are likely to be so modest as to leave an important part of their income for the satisfaction of demands considered less essential or, in some cases, even undesirable

Family living inquiries carried out in Colombia in 1953 permit some comparison of the expenditure patterns of workers in seven major cities with those of rural workers [70] The total expenditure of the former group appears to be nearly twice as high as that of the latter, and the urban workers appear to have consumed more

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[63] Jacques Lambert, *Le Brésil Structure sociale et institutions politiques* Cahiers de la Fondation Nationale des Sciences Politiques No 44 Paris 1953

[64] *The Development of Brazil Report of Joint Brazil United States Economic Development Commission* (Washington D C Institute of Inter American Affairs Foreign Operations Administration 1953)

[65] One bolivar = $U S 0 30 The rural average is increased by the inclusion of some farm administrators and transport workers in the group the average monthly income for families of agricultural workers was Bs 128

[66] Unión Panamericana *Causas y Efectos del Exodo Rural* [illegible]

[67] [illegible]

Conference

[68] [illegible]

[69] *The Development of Brazil Report of the Joint United States Brazil Economic Development Commission* p 44

[70] The data are summarized in United Nations *Analyses and Projections of Economic Development III Colombia* (E/CN 12/365) pp 176 177 The rural group investigated was small and not selected by sampling procedures it is not clear to what extent it is representative of the Colombian rural population

food than the rural, while devoting a much smaller percentage of their incomes to it In families of urban white-collar employees, the percentage of expenditures devoted to food fell to 39

| | Urban employees | Urban workers | Rural workers |
|---|---|---|---|
| Foodstuffs [71] | 39 per cent | 49 per cent | 63 per cent |
| Housing | 21 | 17 | 4 |
| Other services and misc | 14 | 10 | 9 |
| Clothing and household linen | 11 | 10 | 11 |
| Other manufactured goods | 15 | 14 | 13 |
| | 100 | 100 | 100 |

With the exception of a few of the more prosperous and industrialized cities of Latin America, 50 per cent or more of the average urban working class family income is devoted to food If this percentage is taken as an inverse indicator of the level of consumption, the Latin American cities are midway between those of Asia, [illegible]

of industrial workers shows that income declines, and the percentage spent on food rises, as one moves from the rapidly developing cities of the south to the relatively backward east and north-east [72]

| | Average monthly family income in cruzeiros [73] | Percentage of expenditure on food |
|---|---|---|
| Pôrto Alegre | 3,787 | 35 4 |
| São Paulo | 3,299 | 41 1 |
| Federal District (Rio de Janeiro) | 2,604 | 47 3 |
| Belo Horizonte | 1,703 | 41 6 |
| Salvador | 1,173 | 58 3 |
| Recife | 1,360 | 52.5 |
| Natal | 726 | 54 7 |

In most of the cities, of course, there are groups of casual labourers and self-employed whose incomes are far below those of industrial workers and who can afford to buy little besides food, a study of a slum district mainly inhabited by families without regular jobs, in the city of Cartagena, Colombia, found that 80 per cent of the average income was spent on food, although food consumption was "shockingly small" [74]

### Housing and urban facilities

The older cities of the Spanish-speaking countries were laid out according to standard regulations issued by the Council of the Indies in the sixteenth century public buildings were grouped around a central plaza, streets followed a rectangular grid, and "housing and social status declined along a gradient drawn in any direction from the plaza to the edge of the city".[75] The workers, however, were excluded from the planned cities Outside the city proper, and without regular streets or municipal services, "grew up semi-autonomous villages of Indians who, together with Negro slaves, constituted the labouring class" [76] The cities of Brazil, although they were not subject to centralized planning, followed a similar pattern—derived from the traditions of Mediterranean urban civilization—of upper-class concentration in their centres

The modern cities have continued to follow this physical pattern in the main, although on a vastly larger scale and with many variations caused by topography and the circumstances of their growth In general, the central parts of the cities are being re-developed with broad avenues and plazas, and with public buildings, office buildings, and upper-income housing constructed along the most modern lines, while the periphery is occupied by the poorer classes, many of them living in shacks built by themselves or previous occupants [illegible]

American cities than of cities in other regions In some cases, where the topography of the city proper includes steep slopes, swamps, or other waste land unsuitable for permanent buildings, occupant-built slums are found near the urban centre, small numbers of shacks built by squatters may also be found on vacant lots scattered throughout a city The peripheral slums are frequently displaced and pushed farther out by the expnsion of the city proper, and building and street-widening operations in the centre often eliminate the older tenement slums and drive more low-income families to the periphery

In contrast to the boom in construction of housing for the well-to do, there is very little private construction [illegible]

In most of the larger cities, the expansion of public transportation, electricity, water supplies and sewage disposal systems has lagged far behind population growth The situation in Rio de Janeiro, described in the following statement, is not unique. "For the working masses the transportation problem is a tragic one... [illegible]

also very serious It is astonishing that the city does not suffer from epidemics The water shortage leaves many sections of Rio completely dry for periods which vary between a week and a month. [77] The inadequacy

[71] Including in the case of the rural families, allowance for foodstuffs produced and consumed by them

[72] *Anuário Estatístico do Brasil* 1953

[73] One cruzeiro = $U.S 0 0274 (free rate in 1952)

[74] Colombia, Instituto de Crédito Territorial, *Chambacú Regeneración de una Zona de Tugurios* Serie Estudios Socio-Económicos No 1 (Bogotá, November 1955)

[75] Floyd Dotson and Lilian Ota Dotson, "Ecological Trends in the City of Guadalajara, Mexico", *Social Forces*, vol. 32, No 4, May 1954, p 367

[76] *Ibid.*

[77] José Arthur Ríos, "Rio de Janeiro", *Great Cities of the World Their Government, Politics and Planning*, W A. Robson, Ed (London, 1954)

of public transport derives largely from the importance of fares in working-class budgets, increases are commonly followed by political protests, demonstrations, and even burning of street-cars In the absence of adequate revenues or municipal subsidies, antiquated equipment is not replaced, and transportation lines are not extended to newly urbanized areas The inadequacy of transport often leads to the creation of shantytowns as close as possible to the factories or other places of employment

So far as piped water, electricity and sewage disposal are concerned, statistics in recent censuses indicate that in the major cities from 10 to 30 per cent of the dwellings lack such facilities, which are generally considered indispensable to a satisfactory urban level of living These percentages may give a rough indication of the proportions of occupant-built slum dwellings Most other dwellings in the Latin American cities possess such facilities, although they may be ' collective " (e g , a water tap in a courtyard serving several families) and shortages may limit the use of water and electricity

It is generally assumed that recent migrants are to be found in the shantytowns in the peripheral or waste-land parts of the cities Existing evidence on the origins and characteristics of the dwellers in such localities, however, is too limited to permit any firm conclusions The localities in question vary in quality At the one extreme there are groups of shacks built of scrap materials by squatters on vacant land, occupied by casual labourers and persons with various makeshift occupations, and with poverty and family disorganization at a maximum, at the other extreme there are settlements of fairly substantial small houses built by regularly employed industrial workers with titles to the plots of land and with some pride of ownership In the latter instances, the main deficiencies are in urban services and in convenient transportation to factories and shopping centres The more tolerable examples of occupant-built housing, however, are in the main the work of families well established in the city, able to afford a minimum of building materials and to exert effective pressure on the authorities to grant them titles to State land

It is also generally assumed that most of the migrants are worse housed in the urban slums than they were in their previous homes, and that, moreover, they are deprived of the family and community solidarity that are assets of rural life It must be recalled, however, that an important part of the rural and small town population of Latin America lives in extremely bad housing, that safe water supplies and electricity are generally lacking, and that rural conditions are often not propitious for stable community and family life For example, in some areas of large-scale cattle or sheep raising or of plantation crops where a large labour force is required for only part of the year, the estates do not provide accommodation for the families of workers and the workers themselves are semi-migratory Their women and children congregate in temporary settlements (*rancherios* or *pueblos de ratas*) outside the estates, and are visited and supported only irregularly by the men Such rural slums often have no legal existence, no claim to the land they occupy, and receive no services from the State A recent Uruguayan study of such a settlement asserts that although the suburban slum may resemble the *rancherio* physically, and although its population is recruited partly from the underemployed rural workers and their informal *rancherio* families, the suburban slum does not have a similar atmosphere of static and apathetic poverty Job opportunities are more varied, wage rates much higher, and the national or municipal government provides some educational and health services, while for the *rancherio* " absolutely nothing has been done ' [78] The *rancherios* are not typical of most of rural Latin America, but they indicate that the worst features of the city slums are not confined to the cities

The illustrations given in the following pages, drawn from recent housing censuses and local surveys, provide some indication of the variations in types of urban slums (and in the names by which they are locally known)

*The favelas of Rio de Janeiro* Transport difficulties, combined with the topography of the city, have fostered the growth of the characteristic Rio slums known as *favelas* The city area is broken up by a number of steep hills, until recent times, the city expanded around them, leaving them unoccupied As transportation from the periphery became increasingly inadequate and time-consuming, and as many of the older slum tenements near the centre were torn down and replaced by business buildings, the lower paid workers began to settle on the hills, building huts of clay, sticks, and scrap materials This movement first assumed large dimensions in the 1930's In July 1950, it was estimated that about 14 3 per cent of the population of the Federal District (Rio de [illegible]

born outside the Federal District, mainly in the neighbouring States of Rio de Janeiro and Minas Gerais The 1950 census data indicated, however, that the *favela* dwellers were less of a marginal population than had been previously believed, at least in so far as their economic characteristics are concerned The percentage of persons employed in manufacturing industry was higher in the *favelas* (22 3 per cent of the population ten years of age and over) than in the Federal District as a whole (13 1 per cent) Nine per cent were economically inactive, as compared with 6 8 per cent for the Federal District [79] Incomes, however, were too low to pay for adequate housing A census of *favelas* carried out by the Prefecture of the Federal District in 1948 found

[78] Renzo Pi Hugarte and Germàn Wettstein *Rasgos Actuales de un Rancherio Uruguayo* (Biblioteca de Publicaciones Oficiales de la Facultad de Derecho y Ciencias Sociales de la Universidad de Montevideo 1955)

[79] I B G E (Instituto Brasileiro de Geografia et Estatística)—Conselho Nacional de Estatística, Serviço Nacional de Recensea mento, " As Favelas do Distrito Federal e o recenseamento de [illegible] 261 [illegible] ious [illegible] has [illegible] and [illegible] em [illegible] *no* [illegible] *nça*

that about 13,000 out of 50,000 gainfully employed persons received less than the legal minimum wage (cr$400 $U S 21 60 monthly) and that only about 11,500 received incomes over cr$1,000 ($U S 54 00) monthly The majority owned their own houses, but two-thirds of these houses were valued at less than cr$2,000 ($U S 108), only 24 per cent had a toilet or latrine, only 7 per cent had a piped water supply, and 38 per cent had electric lighting, "generally obtained through a redistribution system at high prices and with consumption limited to short periods " [80]

In São Paulo and the other cities of southern Brazil, slums similar to the *favelas* exist, but house a relatively small proportion of the lowest paid workers, the majority of workers live in overcrowded tenements and devote a rather high share of their incomes to rent, " A two room apartment in a blighted *barrio* may be rented for cr$1,500 per month, a relatively low figure for crowded Sao Paulo, but representing upwards of half the going monthly wage of an unskilled worker " [81]

*The Vilas de Malocas in Porto Alegre* Shantytowns called *vilas de malocas* began to appear in the Brazilian city of Pôrto Alegre in 1946 and 1947, by the middle of 1949 there were twelve of them with a total population of 18,000 (Pôrto Alegre at that time contained about 380,000 inhabitants all told, according to one estimate, 100,000 to 120,000 of these lived in slum housing of one kind or another—tenements, isolated shacks, etc ) The *vilas de malocas* sprang up so rapidly that one of them was named Village-that fell from the sky This development can be attributed largely to migration, in three *vilas* in which inquiries were made, 85 95 per cent of the heads of families came from outside the city The location of the *vilas* in Porto Alegre depended on the availability of waste land conveniently near city transport lines or places of employment The first comers attracted relatives and friends, often they built additional shacks for sale, or erected a second more substantial shack and rented their first dwelling In one *vila*, 54 3 per cent of the heads of families were steadily employed, 40 4 per cent irregularly employed, and 5 3 per cent unemployed The income levels were below the average for workers in the city as a whole, but not conspicuously so Some famil es ma nta ned ...

seem to have been conspicuous The *vilas de malocas* ...

developments

*Poblaciones callampas in Santiago, Chile* These localities of improvised housing have developed rapidly around the outskirts of Santiago, particularly in the immediate vicinity of factories, and are believed to be the stopping place of most rural migrants to the city Their population has also been ...
by the
and by
workers
employ... district of Santiago, the population of which grew from 65,000 in 1940 to 145,000 in 1950 and which contains 364 factories, many of the workers live in " ' mushroom ' populations strung along the banks of the sewage canals on public domain and housing an average of 5 2 persons per room in one-bedroom shacks Fifty per cent of the Comuna's housing is considered sub standard and an additional 20 per cent is classed as ' uninhabitable ' ' [84]

The only social survey known of a *callampa* relates to a suburb of Puente Alto, an industrial town (32,000 pop ) thirty two kilometres from Santiago In this case, the population was made up of regularly employed but poorly paid workers, most of whom lived in stable, legally constituted families According to the investigators, three fourths of the men and one fourth of the women worked, but less than one-fourth of those working received salaries meeting their needs This particular locality was in process of transition to a more satisfactory urban status, the inhabitants were suing the owners of the parcelled land on which they lived for not having met the requirements of urbanization, and eventually reached agreement with the landowners and the Town Council on division of costs [85]

*Barrios clandestinos in Colombia* In Colombia, districts of " clandestine ' houses (built without permit) have grown up around the major cities They are least in evidence in Medellin, one of the few industrial centres in Latin America in which the industrialists have undertaken large scale building of houses for their workers According to a recent survey, most of the " clandestine " suburbs are not of the worst type, the houses are small, but built of good quality materials, and " although there are many overcrowded dwellings, one sees, at least in the big cities, few places that can be classified as slum districts such as one often sees in other countries " [86] The clandestine houses ...

affected by erosion

The worst clandest ne ...

[80] *Ibid.*, p 257

[81] Morton S Baratz, " The Crisis in Brazil ", *Social Research* vol. 22, No 3 Autumn 1955 pp 347 361

[82] Laudelino T Medeiros, *Vilas de Malocas (Ensaio de Sociologia Urbana)* (Pôrto Alegre 1951) See also Jean Roche " Pôrto Alegre, Metropole do Brasil Meridionale ", *Boletim Paulista de Geografia*, No 19, March 1955, pp 30-51

[83] Hernán Romero and Jerjes Vildósola, " Ecología de la Ciudad de Santiago ", paper presented to the Sociedad Chilena de Salubridad, 19 April 1954

[84] Ozzie G Simmons, " The Clinical Team in a Chilean Health Centre ", in Benjamin D Paul Ed., *Health Culture, and Community* (New York, Russell Sage Foundation, 1955)

[85] Chilean Committee of Social Work, Contribution to the International Convention of Social Work, Toronto 1954

[86] Yves Salaün, *El Problema de la Vivienda en Colombia* (TAA/Col.1), 17 January 1956, p. 17

slum in connexion with plans for its demolition and [illegible] The [illegible] Chambacu [illegible]

[illegible] among its 8,700 inhabitants were mainly unskilled labourers and persons with irregular or unavowable occupations Poverty was extreme—80 per cent of family income being spent on food although 70 per cent of the children were believed to be chronically undernourished—and family ties were unstable The *Instituto* expects families in its projects to pay up to one third of income for housing, the survey states, however, that about half the families in Chambacu are unable to contribute at such a rate since "it is obvious that even their total income is insufficient to satisfy their dietary needs" Chambacu represents one extreme among Latin American occupant built slums Only a minority of its people, however, were rural migrants 46 per cent of the families had "always" lived in Chambacu, 26 5 per cent came from other slum areas of Cartagena, and 27 5 per cent from outside the city, mainly from nearby areas[87]

*Tugurios, jacales and colonias proletarias in Mexico City* A survey carried out in 1952[88] provides city-wide information on types of housing and the numbers and characteristics of people living in each Five classes of houses are distinguished, two of which, "good housing" and "deteriorating" middle-class housing, mainly apartments, may be disregarded for our present purposes

The *tugurios* consist mainly of one room apartments opening on a courtyard or passageway In most of the *tugurio* buildings there is a family to each room Cooking, washing, etc are carried on in the courtyard, which contains whatever toilets, water taps, and baths there may be The buildings are usually in poor condition Rent controls have kept rents down to an average of 9 3 per cent of family income, but have also removed any incentive for the owner to repair the buildings and there are constant struggles between tenants and landlords In 1952, 993,000 persons lived in the *tugurios* (33 6 per cent of the city population) In the older *tugurios* near the centre of the city, the occupants include small shopkeepers, artisans, white-collar employees, pedlars, and miscellaneous workers Some newer *tugurios* near the outskirts are occupied mainly by factory workers

The *jacales* are shacks built of scrap materials, found in vacant lots throughout the city and in large colonies in some peripheral areas, particularly in the vicinity of factories The occupants have no property rights, and are frequently displaced as the city expands The inquiry found that, contrary to the situation in most occupant-built slums in Latin America, the majority of *jacales* are rented The typical pattern is for the first squatter on a piece of land to build additional shacks for rent In [illegible] per [illegible] mos[illegible] dwellers simply used the waste land surrounding their shacks Electricity is generally lacking, some occupants obtain it illegally by tapping power lines In 1952, about 315,000 persons were living in *jacales* (10 7 per cent of the city population) They were mainly workers, particularly building-trades workers and casual labourers, but included artisans, pedlars, soldiers, and policemen The inquiry did not touch upon their origin, but it is probable that the *jacales* have a higher proportion of rural migrants than other types of housing

The *colonias proletarias* are a newer phenomenon, appearing only since 1940 Organized groups of workers (locally called "parachutists") through political pressure obtained grants of State land outside the city and built their own houses By 1952, 420,000 persons (14 2 per cent of the city population) were living in such "colonies", the majority of the active population being factory workers The houses are more substantial than the *jacales*, but are no better provided with urban services Density of occupation is low, but the localities are arid and barren, without trees or gardens Water is supplied mainly by municipal tank trucks one sees "dozens of women and children waiting for these trucks with pails and other containers to receive little rations of water" Most of the houses do not have electricity or sewer connexions, garbage disposal is generally lacking and huge mounds of rubbish accumulate, the limited public transport is provided by worn-out buses withdrawn from service in the city In some localities close to factorie[illegible] high, the [illegible] other fam[illegible] that in the [illegible] sample groups investigated were considerably higher in the *colonias* than in the *tugurios* or *jacales* 444 51 pesos monthly, as against 343 14 pesos and 198 31 pesos (one peso equalled $U S 0 1156 in 1952)

*Barrios clandestinos and the Ciudad de Dios in Lima, Peru* In Lima, both overcrowded tenement slums and localities of improvised "clandestine" construction have been growing in population and have been described in terms similar to the *tugurios* and *jacales* of Mexico City As usual, workers' housing has represented a very small fraction of construction, and public projects have generally not helped the lowest-paid groups Very recently, the housing shortage in Lima has given rise to a phenomenon resembling the *colonias proletarias* of Mexico City In December 1954 more than 10,000 people under organized leadership took possession overnight of a tract of State desert land sixteen kilometres south of Lima Within a few days the new settlement, called "Ciudad de Dios" ("City of God"), grew to more than 25,000 and in a few months to more than 50,000 The Government recognized the *fait accompli* and promised to give the settlers title to the land and to provide urban services The settlers appear to have been mainly workers resident in the city for some time, some of them had been recently expelled from clandestine housing on privately owned land

*Cerros and quebradas in Caracas, Venezuela* The location of improvised slums depends mainly on the topography of the city they are found on steep mountain

[87] Colombia, Instituto de Crédito Territorial, op cit

[88] Banco Nacional Hipotecario Urbano y de Obras Públicas, *El Problema de la Habitación en la Ciudad de México*, Estudios No 6 (Mexico, D F, November 1952)

slopes (*cerros*) and along ravines subject to seasonal floods (*quebradas*) According to a 1953 estimate, 311,000 out of a city population of 807,000 (38 5 per cent) lived in the *cerros* and *quebradas* The 1950 census classified only 17 4 per cent of the Caracas dwellings as *ranchos* (shacks), but remarked that a higher percentage might have been so classified in view of their dirt floors, thatched roofs, lack of interior sanitary facilities, etc Between 1941 and 1950, according to census data, the number of *ranchos* in Caracas almost tripled A study of 136 families living in *ranchos* in 1953 found that 74 per cent of them had lived in Caracas less than eleven years Eighty four per cent owned their dwellings, most of these ranged in value between 1,000 and 2,500 bolivares (1,000 bolivares—$U S 300) Their shortcomings were typical, only 18 per cent of the dwellings had piped water, 29 per cent had some kind of toilet or latrine, 51 per cent had electricity Durable consumer goods, however, were owned by more families than in the average occupant built slums of Latin America, 72 per cent of the families had radios, 31 per cent sewing machines, 13 per cent refrigerators, and 7 per cent washing machines [89]

*Villas miseria in Argentina* In the Argentine cities, rent controls have been in force since 1943, and because of subsequent rises in wage and price levels, most working [illegible] a very [illegible]

black-market practices have become common in housing transfers, and it has been almost impossible for low income families without savings to find new dwellings The poorest of the recent migrants to the cities have been forced into peripheral shantytowns, locally known as *villas miseria*, although this problem is apparently on a smaller scale than in most other Latin American countries According to surveys made by the Comision Nacional de Vivienda in preparation for an emergency housing programme, the *villas miseria* of Greater Buenos Aires in 1956 housed about 100 000 persons (2 per cent of the city's [illegible] had arisen [illegible] flooding or [illegible]

*Conclusions concerning housing and urban facilities*

Almost every Latin American country has a low cost housing programme, but in the majority of cities the slums are growing faster than the housing projects In Rio de Janeiro, according to the study cited above during the period 1945 to 1949 marriages took place at twice the rate at which new dwelling units were recorded so that even apart from migration to the city there was a considerable deficit of dwellings for new households, a deficit met in part by unlicensed construction, either in the *favelas* or around the periphery of the city In 1951, Colombia's needs for urban low-cost housing construction were estimated at 25,000 units per year [illegible] 1954 [91] Most of the other new low income housing has been of the improvised " clandestine " type

In Mexico, between 1939 and 1950, the Federal District, with 12 per cent of the national population, absorbed 55 5 per cent of the national investment in construction, which, however, consisted mainly of high rent apartments and expensive houses, business buildings, and factories, the factories were generally constructed without any provision for the housing of workers they attracted to the outskirts of the city, and the building boom itself attracted numbers of construction workers from other areas Between 1940 and 1951 the number of families in the Federal District increased by 296,000, while only 176,596 new dwelling units were completed, including 13,355 by public housing agencies [92]

In fact, in most of the cities, housing programmes have up to the present done little more than enable white-collar employees and the better paid skilled workers to escape from the slums As some of the examples above indicate, a good many of the slum dwellers have incomes too low to permit them to pay even a modest rent Furthermore, families with somewhat higher incomes, inured to low housing standards, may prefer living in a shack rent free to the sacrifice of paying rent for better quarters [93] These difficulties are intensified when the housing projects are located far from places of employment, thus increasing or introducing transport costs, or when they take the form of massive blocks of apartments, in which the former occupants of urban adaptations of primitive rural housing must try to adjust themselves to the most modern form of big city housing [illegible] supplementary sources of income [illegible] h as the raising [illegible] ie most vigorous housing and slum clearance programmes in Latin America has been undertaken in Caracas by the *Banco*

[89] Unión Panamericana, *Causas y Efectos del Exodo Rural*

[90] República Argentina, Comisión Nacional de la Vivienda *Plan de Emergencia Informe elevado al Poder Ejecutivo Nacional Abril de 1956* Buenos Aires 1956

[91] Yves Salaun, *op cit.*

[92] Banco Nacional Hipotecario Urbano y de Obras Públicas *El Problema de la Habitación en la Ciudad de México*

[93] [illegible] will entail the bothersome and relatively expensive transportation to the job by bus." (Earl Parker Hansen *Transformation the Story of Modern Puerto Rico* (New York, 1955) p 357)

*Nacional* of Venezuela, assisted by the large national oil revenues In Caracas, shantytowns have been demolished by bulldozers and their occupants moved directly into elevator apartment buildings The families, however, are expected to pay up to one third of their incomes for rent, and it is not clear whether rent free shacks can be permanently eliminated on these terms According to a study by the *Corporación Nacional de Vivienda* of Peru, out of 12,000 applicants for 1,112 dwellings in a new housing estate, 73 8 per cent had an income too low to allow them to pay the rent, assuming 20 per cent of income to be a reasonable rent

With the probable exceptions of the cities of Argentina, Uruguay, Venezuela and southern Brazil, it is doubtful whether, even with considerably increased budgets, the Governments can devote enough resources to urban housing to rehouse the whole of the present slum populations, plus the influx that can be expected in the near future, at least until income levels of the lowest paid groups have risen enough to enable them to pay a [illegible]

building, provision of technical advice and building materials so that the new houses can meet minimum standards, and provision of occupant-built localities with the essential services demanded by urban conditions

### Diet and urban food supply

Observers differ as to whether, on the whole, urban Latin Americans are better or worse fed than rural Latin Americans, evidence is very scanty and of doubtful representativeness The typical rural diet consists of one or two starchy staple foods—maize, rice, potatoes, manioc, or plantains in different regions—beans, and sugar, with small amounts of meat and fish (often dried) To judge from national food balance sheets, even the calorie content must be very inadequate, and animal protein consumption is low [94] Peasants in some areas are reported to consume home-grown green vegetables and other fresh produce Elsewhere, and particularly among landless plantation labourers, rural malnourishment may result from dietary habits as well as from [illegible] to [illegible] erv- [illegible] of rural migrants to foods other than rice and beans, even when these are offered to them free in government reception centres Deficiency diseases are widespread In Mexico, Central America, parts of the Caribbean area, in Brazil, and also in Colombia, Ecuador and Paraguay, the syndrome known as " kwashiorkor " or " syndrome policarencial infantil " (characterized by oedema, hypoproteinemia, dermatitis, alterations of the hair and of the skin, and mental apathy) has been found to be a common consequence of transferring newly-weaned infants to the adult diet, high in carbohydrates and low in proteins and various nutrients [95] Nutritional studies of children in Central America have also found a marked retardation in the rate of growth and of bone development following weaning, such retardation is especially frequent and serious among the children attending rural schools [96]

The poorer classes in the cities usually retain a monotonous, unbalanced, and inadequate diet Family living inquiries, however, suggest that higher cash incomes enable most city working-class families to consume more food, while spending a smaller percentage of income on food than do rural families, and that as incomes rise the consumption of meat, milk, eggs and other foods of high nutritive value (as well as canned foods and bottled beverages) increases more rapidly than consumption of cereals and legumes The city dweller is also likely to be exposed to some education in favour of a better diet His children may be given lunches or milk in school In some of the larger cities, particularly in Brazil, an important proportion of the workers are able to eat some of their meals in government sponsored low-cost restaurants

The increasing demand for food arising from the expanding urban population and the higher urban incomes, however, has not been satisfactorily met The larger cities suffer from chronic shortages of perishable foods and even staple foods, and from inefficient, expensive and unsanitary distribution systems In a number of Latin American countries, food crops for local consumption are produced mainly by small cultivators [illegible]

urban growth, cities have been forced to depend to a large extent on imports from abroad If the small cultivators do not bring their own produce to the city market on foot or by truck—an extremely time consuming system—the gap between the prices they receive and the urban price is usually excessive Furthermore, facilities for collecting, storing, and transporting perishable produce are inadequate Decay and vermin take a heavy toll before the produce reaches the city, and its condition when sold is likely to be poor or even dangerous Most of the cities attempt to enforce sanitary standards in food markets, but it is difficult to control the hundreds of petty vendors squatting along the curb or selling from door to door

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[94] These statements do not apply to the meat producing countries of southern South America (Argentina and Uruguay) where levels of food consumption are much higher than in other countries of the region.

[95] See Marcel Autret and Moise Behar *Sindrome Policarencial Infantil (Kwashiorkor) and its Prevention in Central America* Food and Agriculture Organization, Nutritional Studies No 13, and J Waterlow and A Vergara *Protein Malnutrition in Brazil,* Food and Agriculture Organization Nutritional Studies No 14

[96] *Publicaciones Científicas del Instituto de Nutrición de Centro America y Panama* Boletín de la Oficina Sanitaria Panamericana Suplemento No 2 (Washington, D C., 1955) pp 4-5

### Health and medical care

In medical care as in other social services, the Latin American cities are incomparably better off than the countryside, the extreme concentration of physicians and hospitals in the cities is well known A recent study of rural living conditions in the State of São Paulo, Brazil, asserts that " the low sanitary level, the lack of minimum conditions of hygiene, the almost total impossibility of obtaining medical hospital assistance, the complete insecurity of maintaining or recovering health, are important components in the explanation of the rural exodus " [97] Many of the cities have networks of health centres and clinics reaching even the poorest groups, such facilities have expanded considerably during the past decade, usually under the auspices of the social security systems The health centres depend largely on part time attendance by physicians who also carry on private practice, and the wide gap in social status between them and the patients is likely to affect the relationship between doctor and patient and the quality of the service [98] The health centre staffs, however, usually include visiting nurses and social workers who are more familiar with the patients' problems and who carry on health education in the homes

Recorded rates of general mortality and infant mortality have fallen in the major cities in recent years While the statistics are often of doubtful validity, they probably reflect a trend of real improvement in health conditions, in spite of the prevalent urban overcrowding poor sanitary conditions and malnutrition In the *municipio* of São Paulo in the years 1939/41, 137 8 deaths of infants up to one year of age were reported for every 1,000 live births, in 1949/51 the rate had fallen to 93 4 In the Federal District of Brazil during the same period the rate fell from 159 3 to 97 2 In other Brazilian cities the reported rates were higher in both periods but also showed decreases [99] It is estimated that life expectancy in the main urban centres of Brazil increased by twelve years during the decade 1940-1950 [100] In Mexico City between 1941 and 1950 the general mortality rate declined from 21 4 to 14 4 per 1,000 population while infant mortality declined from 137 2 to 101 9 [101] Mortality from tuberculosis of the lung fell from 41 0 per 100 000 population in 1948 to 18 2 in 1953 mortality from syphilis from 17 5 to 4 9 in the same period [102] In Lima, the estimated general death rate fell from 15 9 in 1940 to 9 4 in 1953, while the infant mortality rate declined from 135 9 in 1940 to 75 5 in 1953 In Lima in 1940, tuberculosis caused 265 of each thousand deaths, by 1954 the number had fallen to 90 [103] The declining crude death rates in Latin American cities are caused in part by immigration of young people, but there is no doubt that chlorination of water supplies, vaccination campaigns DDT, expansion of medical services, and health education have all contributed In Mexico City, and presumably in other cities, rates of infant mortality, general mortality, and morbidity from diseases such as typhoid fever, are much higher in the slums than in other parts of the city, but the slums are nevertheless sharing in the general decline of rates

### Education

Public schools in the Latin American cities are frequently overcrowded and poorly equipped, and children in the peripheral occupant built slums often have to travel long distances to school, but, in contrast to the rural areas most urban children do go to school long enough to become functionally literate The 1950 Venezuelan census found that 78 4 per cent of the school age (7 14) children of the urban area of the Federal District were in school, 70 7 per cent of the urban school age children of the whole country, and only 32 6 per cent of the rural school-age children The following reasons were given for the absence of the children who were not attending school

| | *Federal District Per cent* | *All urban areas Per cent* | *Rural areas Per cent* |
|---|---|---|---|
| No school available, or no room in the school | 21 7 | 18 2 | 57 0 |
| Working | 19 7 | 21 2 | 15 3 |
| Lack of shoes clothing etc | 36 9 | 44 7 | 23.5 |
| Invalidism or chronic sickness | 9 3 | 7 1 | 2.1 |
| Causes not specified | 12.3 | 8 8 | 2.1 |

The same census found that 83 2 per cent of the Federal District urban population fifteen years of age and over were literate 69 2 per cent of the national urban population fifteen and over, and 27 2 per cent of the rural population fifteen and over [104] In Cuba according to the 1953 census, a similar differential is found [105]

| | *Percentage attending school* | | | *Percentage literate of population ten years of age and over* |
|---|---|---|---|---|
| | *5 14 age group* | *15 19 age group* | *20-24 age group* | |
| Havana urban population | 77 4 | 37 4 | 12 9 | 95 0 |
| Total urban population | 69 0 | 27 1 | 8 4 | 88 4 |
| Rural population | 34 9 | 7 0 | 1 6 | 58 3 |

These percentages are roughly typical of the differences in the educational levels of the capital cities, the urban areas in general, and the rural areas throughout Latin America In the countryside, the deficiencies in school attendance are caused mainly by lack of schools and by the fact that the existing schools offer only two to four years of instruction In the cities failure to attend school is caused mainly by poverty Even in the *favelas*,

[97] Comissão Interestadual da Bacia Paraná Uruguai *Problemas de desenvolvimento Necessidades e possibilidades do Estado de São Paulo* I volume (São Paulo 1954) p 220

[98] Ozzie G Simmons op cit.

[99] *Anuário Estatístico do Brasil* 1955 p 61

[100] *The Development of Brazil Report of Joint Brazil United States Economic Development Commission* p 9

[101] Banco Nacional Hipotecario Urbano y de Obras Públicas, *El Problema de la Habitación* .. pp 80-81

[102] Mexico Secretaría de Salubridad y Asistencia *Memoria del Seminario Nacional de Organización de la Comunidad para el Bienestar de la Familia y Protección del Niño* 1954 pp 43-44

[103] Joseph A Cavanaugh, op cit.

[104] *Octavo Censo General de Población (26 November 1950) Alfabetismo Asistencia Escolar y Nivel Educacional* (Caracas, 1955).

[105] *Censos de Población, Viviendas y Electoral Enero 28 de 1953 Informe General* (La Habana, August 1955).

*callampas*, *jacales*, and *cerros* the majority of children attend school, although probably with more irregularity than in the rest of the city Schools are not generally found in the improvised shantytowns themselves, but there are some conspicuous exceptions—observers in Mexico City and in the Brazilian cities have described ultra-modern schoolhouses standing out as the only substantial buildings in such slums A 1953 study of the *cerros* of Caracas found that about three-quarters of the children were in school and that schools were accessible to all, though often not at a convenient distance Among the Caracas working-class families previously mentioned,[106] 91 per cent thought that their children should stay in school for six years and 86 per cent thought that their children were receiving adequate schooling, there were no significant differences between the answers of families in the slums and those in the housing projects Among a group of rural famil es in the Andean region of Venezuela, studied at the same time, the majority were in favour of five or six years of schooling, but some of their hamlets had no schools and the schools that existed outside the capitals of the *municipios* offered only three years of instruction

In a group of migrant families investigated in Lima, [illegible]

[illegible] population five years and over were illiterate, illiteracy in the age group 15 19 was only 24 1 per cent (compared with 10 5 for the same age group in the Federal District as a whole) [108]

Latin American education, even in the rural schools, has a strong urban bias The schools reflect and inculcate the high prestige accorded to urban life and occupations and the low prestige accorded to agricultural labour, programmes intended to adapt schools and teachers to rural needs have thus far had only a limited influence The rural schools are therefore sometimes accused of stimulating migration to the cities, although the strength of this influence is hard to assess " The training of the teacher, exclusively urban in character, is actually a negative factor in the training of future agriculturists For this and other reasons, the rural school, teaching merely reading and writing, has been an efficient factor in rural depopulation It has prepared the child for the so-called ' civilized ' life and has created in him, to a certain extent, a distaste of the soil Unconsciously the teacher helps drive the people from the farm to the urban centres "[109]

PROBLEMS OF URBAN FAMILY LIFE

There is no satisfactory evidence for Latin America in general on the extent to which urbanization has involved disruption and breakdown of family life It is known that there are large numbers of irregular families in the slums of most of the larger cities, families in which the lack of a permanent male partner who assumes responsibility for support of the children condemns the latter to extreme poverty and undernourishment, and drives many boys into the street at an early age to forage for a living through odd jobs and petty theft It is impossible to say, however, what proportion of urban lower-class families are of this type, whether the majority of such families are recent migrants or descendants of the older urban slum population, or even whether irregular families are more prevalent in the cities than in the countryside There appears to be no general and consistent pattern of strong rural families versus disorganized urban families, but a wide variety of forms of family organization and disorganization and trends therein both in the cities and in the countryside While some migrants undoubtedly become demoralized through city life, others, *once they secure steady employment*, may perhaps be stimulated to bring their family ties into line with national legal codes and to assume a higher degree of responsibility for the welfare of their wives and children than when they were rural labourers living at a bare subsistence level

The conjugal or nuclear family has become the prevalent type in Latin American cities, as in most cities throughout the world, the great majority of newcomers eventually establish such families, or they may migrate as conjugal families For many of them, the conjugal family in the city replaces a rural extended family, but this is by no means always the case The extended family in Latin America is more characteristic of the (mainly urban) upper class than of the peasants and rural workers Family connexions are maintained in government, business, and professional careers, mansions with room for several generations are fairly common, and large undivided landholdings are sometimes preserved by joint heirs, so that the wealthy families tend to remain together The peasants in most of Latin America are involved to some degree in extended family ties, though not generally to the point of maintaining joint households or joint cultivation of land,[110] and family obligations are purposely broadened by the *compadrazgo* (godparent) system, but family types vary with the locality In many rural areas, stable conjugal families are the norm, whether legally constituted or consensual In much of the Caribbean area, however, and among semi-migratory plantation workers elsewhere, the woman is often the only stable element in the family, assuming sole responsibility for the support of the children who may result from a number of temporary relationships with men Among such rural groups, family instability may be as damaging a phenomenon as among urban workers

Census figures for a few Latin American countries

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[106] Unión Panamericana, *Causas y Efectos del Exodo Rural*

[107] Sra Marina Córdova Molla, op cit

[108] I B G E.—Conselho Nacional de Estatística, " As Favelas do Distrito Federal . "

[109] Carlos Borges Schmidt, " Rural Life in Brazil ", *Brazil Portrait of Half a Continent* (New York, 1951), p 173

[110] In some [illegible] of relatives over boundaries and inheritance rights (Metraux, op cit.)

indicate that legal marriage, in contrast to "consensual unions", is more common in urban than in rural areas,

do not prove that families are more stable in the cities, since more of the rural than of the urban "consensual unions" may represent permanent marriages that have not been legally registered Legal marriage is both easier and more obviously advantageous in the city, where registration is less difficult, where higher cash incomes make it easier to pay the costs of formal marriage, and where marriage may affect the status of children and entitlement to social benefits In Chile, an increase in marriages and decrease in the proportion of illegitimate births has been attributed to the extension of family allowances or wage benefits, the benefits are conditional on civil registry of the marriage and children [111] In Uruguay, "there is no doubt that the Family Allowances exercise a favourable influence on the establishment of the family as a legal entity Statistics are lacking, but it is a general impression that industrial workers accept the responsibility of acknowledging and making their children legitimate and their marriage relationship legal, more frequently than do their fellow workers in the rural areas They do not have the problems of distances and the Family Allowance for the children is an added stimulus However, we cannot conclude that the formal compliance with such legal processes assures a greater consciousness in the acceptance of paternal obligations "[112]

Divorce (in the countries that recognize divorce) is statistically mainly an urban phenomenon, but this also is not a reliable indicator of the degree of family stability, among the poorer classes, informal separations and desertions are more common than legal divorce, both in the cities and in the countryside An increasing divorce rate may mean increasing recognition of the legal aspects of marriage rather than increasing family instability

The disintegration, with migration, of the traditional system according to which the family is both a social and an economic institution undoubtedly has an important and disruptive effect in Latin America as in other regions undergoing urbanization, but it is not known what proportion of the newer urban residents come from environments in which the family actually works as an economic unit, the propotion is probably much less than in Asia or in Africa

The family backgrounds of migrants to the cities are thus extremely heterogeneous and much more research is required before any firm conclusions can be drawn regarding the effect of urbanization on family life in Latin America One can only assume in an *a priori* fashion that a well adjusted family life must be extremely difficult in the conditions of living in which many migrants find themselves in the urban environment

A recent study [113] has pointed out that most generalizations about the family adjustments of urban migrants in Latin America have been inferred from the conclusions of studies made in other parts of the world, and from limited statistical data applying to the urban areas in general The same study reported an investigation

this particular case actually contradicted most of the common assumptions about urban impact on family life In the selected group of migrants, there were no cases of abandoned mothers and children, and there was some evidence that "family cohesiveness increases in the city in the face of the difficulties of city life" Young people enjoyed more freedom in the city but there were few signs of rebellion or weakening of parental authority Persons who had lived in the city for many years maintained close ties with relatives in the community of origin and frequently visited it, 56 per cent of the city families owned a house in the rural community and 30 per cent kept title to a plot of cultivable land The migrant group investigated in this study was probably not typical of the great mass of migrants to the cities, but it was also not unique, there is some evidence of similar adjustments and continuing ties with the home community among migrants to Lima from some of the more progressive of the highland Indian communities

In most rural communities of Latin America, women are kept in a subordinate position Urbanization usually means an improvement in the status of women, since

or because their local status has been compromised by a sexual indiscretion The numerical predominance of women among the migrants to cities and among the younger adults in the cities implies that many of them must be unable to find husbands, the social consequences of this situation, however, have not been explored Many of the young women migrants, as previously stated become domestic servants, and various observers have asserted that irregular sexual relationships are common in this group, and that many of them are recruited into prostitution It is also frequently stated that many self supporting working-class women in the cities prefer consensual unions in order to preserve their freedom from male domination This motive and solution, however, have also been reported in some rural parts of Latin America

The extent to which migrants come to the cities in

There are, no doubt, also a number of men who have left their families in the countryside, but this problem is much less important than in Asia or Africa

[111] Octavio Cabello "The Demography of Chile" *Population Studies* (London) vol. IX, No 3 March 1956 pp 237 250

[112] *Report of the Uruguayan National Committee*

[113] Oscar Lewis, "Urbanization without Breakdown A Case Study", *The Scientific Monthly*, vol. LXXV, No 1, July 1952, pp 31-41

### Voluntary organizations in the cities

The extent of formal and informal organization among the lower economic classes and in the slum areas of the cities is a subject about which little is known and which needs investigation A 1951 survey of 231 households in the city of Guadalajara, Mexico, found that four-fifths of the people in the lowest income category were not affiliated with any formal association or voluntary organization—a figure that would appear to indicate a very small amount of local group action Participation in such organizations rose with income, until in the highest income category, three-fourths of the individuals had memberships, most of them in more than one organization Almost all the lower-income memberships were in labour unions (mainly men) and in societies connected with the Catholic Church (mainly women) [114] Recent migrants to the cities are at the lowest income level and the least likely to have organizational ties Clubs of migrants from given localities are known to exist in some cities, but unlike their counterparts in some other regions of the world, they do not appear to be widespread or important as a source of help and adjustment for the migrant

Many of the factory workers and skilled workers in Latin American cities belong to trade unions, in some industries, particularly in Mexico, these unions are strong enough to control the hiring of new workers, and even have affiliates in the villages, so that they can determine the source and the amount of migrant industrial labour [115] Such a role is not typical, however, most of the unions appear to be somewhat insecure and fluctuating in membership according to political currents and the degree of government acceptance and support Artisans and casual labourers rarely belong to unions, and the constant influx of labourers accustomed to small town and rural wage scales has generally limited the effectiveness of union wage demands

### Some tentative conclusions

1 It is easy to point to urgent needs for social action in the Latin American cities The cities, however, already absorb a disproportionate share of government social expenditure, and the Governments are under constant pressure to discriminate in their favour At the same time, some of the most unhealthy aspects of urban growth in Latin America derive from the static and apathetic rural poverty, including the overflow of cheap labour which keeps urban wages down, the inadequacy of the urban food supply, and the lack of economic integration between city and countryside Urban social problems, and the solution to these problems, must therefore be viewed in the larger context of rural-urban relationships

2 Rapid urban growth can be expected to continue in the foreseeable future in Latin America In many areas, in fact, rural migration is evidently desirable to relieve underemployment and counteract fragmentation of land holdings It may be possible, however, to take measures to encourage the wider distribution of urban growth by favouring the establishment of industries in smaller centres rather than the capital and, in general, by regional planning The larger cities at present suffer from extremely bad public transport, chronic shortages of water and electricity, and expensive and inefficient systems of food supply Many of these deficiencies can be met more easily and cheaply in medium-size cities than in mammoth agglomerations

3 While there is an unquestioned need for the construction of a large amount of low cost housing, it must at the same time be recognized that, in view of present housing costs, many of the cities cannot within the near future expect to build adequate permanent housing for all their inhabitants without devoting an excessive proportion of social expenditure to this goal There is therefore a need for realistic studies of the improvised and occupant-built dwellings and of the possibilities of organized efforts on the part of those concerned, to build, expand and improve their own housing with some form of government assistance A number of the worst features of such dwellings could be eliminated through regulation of the sites, " self-help " aid to the builders, and provision of streets, water, electricity, and sewerage

4 Large scale vocational training programmes are urgently needed While the migrants are not so predominantly unskilled agricultural workers as is commonly thought, they do not possess the skills needed for modern industry Industrial expansion, and therefore the absorption into productive employment of unskilled and semi-skilled workers, is hampered by an extreme shortage of skilled workers and supervisors

[114] Floyd Dotson, "A Note on Participation in Voluntary Organizations in a Mexican City", *American Sociological Review*, vol 18, No 4, August 1953, pp 380-386

[115] Wilbert E. Moore, op cit.

*Annex*

# CONCLUSIONS OF THE JOINT UN/UNESCO SEMINAR ON URBANIZATION IN THE ECAFE REGION

*(Bangkok, Thailand, 8-18 August 1956)*

## A

1. Historically, cities have been great carriers and initiators of cultural and economic progress and, for the future, urbanization is one of the major processes which mankind has to use—and which it has to seek to guide—as industry and commerce raise levels of living for the masses of the people The importance of the benefits and opportunities associated with urbanization was recognized by the Seminar, and the fact that most of the Seminar s attention was given to the problems, rather than to the benefits, reflected the practical consideration that it is the problems which require positive action for their solution

2 The Seminar noted that urbanization in most of the countries in Asia and the Far East was leading to serious problems owing to the following facts.

(a) At the present time, there is a larger urban population than is justified by present levels of agricultural and non agricultural productivity Much of this urban population growth has not occurred in response to economic need for large urban population concentrations, i e , from " pull " factors represented by the employment opportunities and expectations of higher incomes from industrial, commercial and service developments, but rather from " push " factors due to the low level of rural living, and sometimes to conditions of physical insecurity On the whole, economic factors—both of push and pull—have been dominant

(b) In most of the smaller countries there is a " primate " or great city many times, sometimes five to ten times, the size of the second city, in contrast with the situation in the West which is characterized by " systems " of cities

These cities are the product in the main of economic develop- [illegible]

[illegible] indigenous national economy

(c) The growth of many cities in Asia and the Far East including that of primate or great cities, was the result of the following types of factors

(i) The low land population ratio arising from rapid population growth in relation to agricultural resources People left rural areas in brief, because there was no way, in the [illegible]

(ii) The disruption and disorganization produced by the last war, and the political changes which followed Many of the cities of Asia are choked with refugees who have swelled urban population out of proportion to their economic development.

(iii) The lure of urban existence, to which large parts of the peasant population was exposed as the result of military service as well as migratory refugee flows

(iv) The actual exhaustion of natural resources in some areas, which deprived some localities of their economic base

(v) Seasonality of employment in agriculture, which creates migratory flows bringing many people in contact with the attractions of city life

(d) The primate or great city may have a paralytic effect on the development of other urban places and tends to be parasitic in relation to the remainder of the national economy The fact that the great cities already exist creates the tendency further to [illegible]

(e) Many cities in Asia and the Far East in contrast with [illegible] elite, indigenous population appears in Asian cities with the same characteristics as those possessed by urban residents in the West, the mass population of many Asian cities are resident in village agglomerations and tend to retain " folk " characteristics The characteristics of the urban resident, identified with such dichotomies or continua as the " folk-urban ", " rural-urban " or " community-society " categories, do not hold for the mass of residents in many Asian cities

[illegible]

3 The countries which are in the situation just described are [illegible]

to eliminate present evils at the expense of failing to increase national productivity and thus dooming the population to continued low levels of living On the other hand, it is difficult to resist the appeal for social investment represented by the dire needs of the mass population Some investment of social capital may, in fact, be regarded as essential to increased productivity For example, investments in education and certain minimum standards of sanitation and housing may be prerequisites to encouraging incentive and increasing labour productivity

4 Most of the countries concerned are acutely aware of their present and impending urban problems and many have specific agencies organized to study and to deal with them Planning agencies, welfare agencies, health agencies, insurance schemes, social legislation and other devices are being employed in an effort to ameliorate the more difficult problems Some countries are seeking to decelerate the rate of urbanization or even to induce swelled urban populations to return to rural areas by (*a*) action to increase agricultural productivity and incomes, including facilities for rural credit and increased utilization of co-operative methods, (*b*) efforts to make village life more attractive, (*c*) the stimulation of village and cottage industries, (*d*) the decentralization of new industrial development, (*e*) improvements in communications, (*f*) resettlement programmes including the opening of new agricultural lands, irrigation, etc , (*g*) land tenure reform and (*h*) general national and regional physical planning though this is at present on a limited scale

B

5 Action on these problems needs to take into account many facets of economic and social life and the Seminar therefore felt it desirable to set out a number of the main issues and possible approaches as follows

(a) *Economic aspects*

6 Effects of urbanization favourable to economic progress in general are the occupational diversification, the greater opportunity of occupational and social mobility and greater readiness to adapt, and the dynamic influence of the technical progress which cities reflect through their contacts with other centres of economic progress

7 Urbanization also by its very nature (i e , the close physical association of widely needed factors of production) brings about "external economies" which increase productive efficiency, as well as internal economies of a scale made possible by broader and more easily reached markets

8 Money incomes are generally higher in urban than in rural areas On the other hand, the participants were divided or uncertain as to whether *real* incomes are likewise higher in urban areas Many cost-of living items tend to be higher in cities Tertiary employment predominates over secondary (industrial) employment in most Asian cities, but much of the tertiary employment is of a marginal kind, including domestic service and a variety of low-productive or "fringe" activities Further, urban consumption patterns differ from rural consumption patterns, and are frequently considered socially "maladjusted"

9 Urbanization imposes a heavy requirement for capital formation for public utilities and housing, an especially difficult burden when urbanization is outpacing economic development and productivity In the short run this, along with the more acutely felt need for educational, health and other basic social overheads, is one of the major difficulties which urbanization creates [illegible] ment process, the distinction between urban and rural areas with respect to such costs may be reduced It might be desirable for studies to be undertaken on different aspects of the comparative cost per head of such basic services in cities and in small towns and villages

10 Because of overcrowding and inability to provide essential facilities and services, many cities of Asia are at the point of developing serious dis-economies in production (transport and power shortages, etc ), as well as of overstraining their function of relieving rural underemployment and setting the pace for national development

11 From the economic as well as other points of view, urban centres must be viewed as closely linked with rural areas in a single interdependent whole Each requires the other and each affects the other Accordingly, the economic advances achieved through industrialization and through urbanization not only depend on manpower, food and other resources obtained from rural areas but also, in a properly planned and balanced programme of economic development can help to bring about a greater degree of advancement and specialization, with generally higher productivity, in the countryside The process of economic development itself is the fundamental premise Urban misery and rural poverty are two sides of the same coin—economic under-development—and without economic development, changes in the distribution of population as between urban and rural areas cannot in themselves satisfactorily solve the human problems involved

12 In the years before the Second World War, the influence of Governments on types, scale and location of industries was in theory, if not always in practice, largely indirect rather than direct in most countries free market competition was generally considered to be beneficial, helping to produce a more efficient allocation of resources and a more healthy production alignment In Asia the resulting industrial development has, however, been somewhat unbalanced in relation to the resources endowment of some countries, industries being frequently modelled on the western pattern using labour saving machinery and making difficult a fuller utilization of the abundantly available manpower Moreover, industry has located itself wherever it was profitable, even though conflicts with interests of social welfare have sometimes developed

13 The high priority accorded in current development plans in the ECAFE countries to investments in basic overheads puts a heavy premium on arriving at wise decisions because, in the long run, policies that determine the type, scale and location of these economic overheads will be largely responsible for the patterns of industrial development and the process of urbanization

14 The weight of employment considerations in the region and the desire to bring about a distribution of industry that will utilize natural and human resources most effectively, is an element strengthening the move to achieve a more decentralised industrial development However, a wide range of both economic and non-economic considerations must be carefully gone into in deciding whether new industrial townships should be developed or the existing centres expanded, or a new pattern of rural dispersal encouraged

15 The creation of employment opportunities without retarding technological progress [illegible] the growth of society's net aggregate product, either directly or by way of its cumulative long term influence

16 Decentralized industrial development in Asian countries is likely to succeed only if considerable guidance is provided to small industries Help is called for all along the line For example, organizations may be developed to bring widely dispersed industrial units together into voluntary trade associations for procurement of raw materials, marketing and research, the usefulness of co-

operatives can be further explored, standardization and quality control can be introduced

17 Along with physical planning as a tool of location policy, the influence of other development policies such as tax policy, public expenditure policy, foreign trade policy, wage policy etc on the location pattern of industry should be borne in mind City and regional planning need to be kept in proper relation to the policies and instruments of over-all national planning

(b) *Social aspects*

18 Urbanization in addition to reflecting technological change and a new form of economic organization produces a new way of life Cultural uniformity and traditional patterns of belief and behaviour tend to be broken, and social change is accelerated This is usually accompanied by social disorganization as the first stage in social reorganization, i e, the emergence of new forms

representing formal social controls, which may be viewed as sub-

security provisions to substitute for the protective functions of the family, and many other institutions to meet needs previously met by integrated family and community life Many of these changes, however have not as yet gone very far in those Asian cities where a large proportion of the indigenous population is resident in an agglomeration of what are in effect villages within the urban framework To the extent that these populations remain isolated from urban contacts they tend to retain their "folk society" characteristics

20 Personal disorganization, which is the subjective aspect of social disorganization, is manifest in such conditions as juvenile delinquency, crime and vice Moreover, since Asian nations tend to be overurbanized, these evidences of personal disorganization are in most of the Asian cities to be found in a matrix of mass poverty and low levels of living productive of high morbidity and mortality

21 Since the family is generally the basic social unit through which socialization of the individual must be accomplished and modes of thought and behaviour shaped, special attention is needed in respect of changes in the family and the problems associated with such changes, including living conditions It was recognized that many of the functions of the family have disappeared or been modified in urban areas, and that inter personal relations of the family have been greatly modified In consequence, it is necessary to safeguard the interest of urban populations so that adequate protective, educational, and recreational needs and other needs previously provided for by the family are met by new urban institutions, such as health and welfare agencies, schools social security provisions including provision for the aged, public unemployment compensations public recreation centres and the like

22 As one aspect of the impact of urbanization on the family, the role of women tends drastically to be changed In the urban setting largely as a result of various factors affecting traditional family organization the woman tends to achieve an egalitarian status, and her more secluded traditional role as wife and mother, in some countries, gives way to broader participation in the economic, social and political activities of the nation

23 Juvenile delinquency and crime and such group manifestations as mass riots are frequently by-products of rapid urbanization There is, however, little evidence that the concentration of population in urban centres or the industrialization which generally characterizes urban development, are, *per se*, directly responsible for increased delinquency or criminality Rather, it is social change and attendant social and personal disorganization which provide the setting for deviate forms of behaviour which are defined as delinquent or criminal in the urban setting.

24. Continued urbanization in Asian countries, if unbalanced and unplanned, may be expected to be accompanied by increased delinquency and criminality, on the other hand, controlled urbanization holds the promise of keeping social disorganization, including delinquency and crime, in check

25 A general device for promoting development in the urban area may be found in some of the techniques of the "community development" programme This programme essentially involves (*a*) the participation by the people themselves in efforts to improve their level of living with as much reliance as possible on their own initiative, and (*b*) the provision of technical and other services in ways which encourage initiative, self help and mutual help to make these more effective Some Governments in this region are experimenting with the application of community develop-

munity development carried on in urban areas in Asia should be disseminated and further experiments encouraged

26 In such a process education must as always play an impor-

secondary and vocational—and the available demographic data

27 Provision should be made in the above facilities and curricula to deal with the special problems both of adults and children of recent rural origin, including problems of language where the urban language is different from the rural dialect, and the need for instruction as to facilities provided by urban life, and its advantages and dangers

28 Further, along with such programmes and action to improve

of new entrants into industry in adapting themselves to fixed working hours and factory life, and to changes in diet and the distribution of the family budget required by industrial life

29 In this connexion UNESCO should consider modifying and adapting its programme of work on Fundamental Education so that, in addition to working in rural areas, it should also deal with persons living in cities who face comparable problems

30 It was pointed out that workers abruptly transplanted from rural to urban areas, particularly from a more or less primitive subsistence economy to a technologically more advanced economy, tend to lack stability, have difficulty in

selves to urban conditions, and lack training for or experience of industrial work, so that their productivity is very low

31 Various measures may contribute towards a solution of these problems Short term measures include diffusing in rural areas accurate information concerning living and working conditions and employment prospects in the towns, and facilities for accelerated vocational training for workers who come to the towns Longer term measures include (i) expansion of the rural and urban school systems and a reorientation of school curricula, with greater emphasis on practical vocational or prevocational training, so as to equip children better for the conditions of urb [illegible]
(ii) the development of voc [illegible]

[illegible] ation is not to create new wants more rapidly than industrialization creates the means for satisfying them, urbanization must be accompanied by a rapid growth in industrial productivity and employment through cottage, small and medium and large-scale industries Measures of manpower policy need to be devised and applied as integral parts of more general policies aiming at economic development and higher levels of productivity and employment In particular (1) there is considerable scope for improved utilization of resources in existing and newly developed industries in under developed countries through the application of modern methods of management and improved working conditions (2) Improved productivity can be made to contribute to capital formation and to the expansion of employment opportunities (3) Since higher productivity has a direct impact on and depends on the support of both labour and management, productivity programmes should seek to secure their interest and support a common basis for mutually advantageous action (4) Productivity programmes should be instrumental in providing a broad range of educational and consulting services (5) Joint "Productivity Centres", with government support, can usefully serve as focal points for the organization and execution of productivity programmes

33 A major element in over rapid urbanization is the great increase in the rate of population growth The rate of population growth may be expected to increase as mortality continues to decrease throughout the ECAFE area Rapid population increase in countries in which the resource-population ratio is already very low tends to increase the importance of the "push" factor in the migration of population from rural to urban areas There is need for study of problems related to over rapid population growth and of policy and means of controlling such growth

34 Although policy can influence the trend to urbanization [illegible]

grammes by granting permits for establishment of retail trade and various other inducements

35 There is no general "balance between the proportion of rural and urban development, as it will differ according to the various social-economic structures The important differences between countries are reflected in differences in specialization and conception of needs which are accepted as "normal"

36 The difference between v [illegible]
cularly [illegible]
panc [illegible]

(a [illegible]
product [illegible]
unempl [illegible] region improved This will help [illegible] put a check on the excessive flow of rural people into urban districts

(b) Decentralization of industries with emphasis on small-scale industries which can be established in villages and small towns In addition to the advantages of strengthening the smaller rural units, this will teach villagers some basic features of machine handling and so bring about a better understanding of the role of the machine in the society This again will diminish the difference between city and village culture

37 In urban areas changes occur in the traditional arts and crafts and forms of cultural enjoyment In respect of these changes a number of generalizations were made Modern machine made articles will probably replace hand made goods in Asian countries unless they are really useful and artistic, and steps should be taken to develop the best work in the traditional crafts Although traditional forms of arts and crafts can be assisted by government information and encouragement, they will survive only if they derive their strength from popular approval, and their utilitarian as well as their artistic aspects must not be overlooked

38 It was noted that during much of the modern era eastern cultures tended to come into contact with western cultures more than with one another At present however, culture contacts between Asian cultures are increasing The results of these contacts will depend on the relative strength of each culture A period of acculturation may bring about confusion of values, but traditional music, drama and dancing seem to be in a particularly strong position in most countries, and some forms of indigenous contributions to science particularly in the field of medicine, are very valuable

39 The strongest influence in the domain of recreation in urban centres is the cinema, although judgements differ as to its cultural value Its social implications need study because of the strength of its influence on persons undergoing social and cultural change There is a great need for public libraries and the production of suitable literature in cities to accompany literacy programmes and to promote civic responsibility Museums, art galleries and the like can, and in a number of cases do, serve as major means of creating community consciousness, spreading incentives to knowledge, aiding literacy, and stimulating innovation in cultural and economic activities

40 Since there is a tendency to emphasize the problems of urban development, particularly as manifest in social and personal disorganization and in the breakdown of revered tradition it cannot be too strongly emphasized that the urban environment also produces social changes generally agreed upon as highly desirable not only through raising the level of living but, also, through stimulating intellectual and artistic pursuits It is in the city that diverse cultures and traditions meet and that the innovator appears It is not an accident that it is in the city that the great intellectual and artistic achievements identified with civilization have originated, including the development of science, literature, music and the arts It is in the city that man has achieved his highest levels of living and greatest intellectual and artistic triumphs

(c) *Physical and regional planning*

41 As the gap between urban and rural living in physical terms namely with respect to housing, community environment, social and cultural services and facilities, continues to widen, the pace of urbanization may be expected to become more rapid in the ECAFE countries as a result of conscious efforts directed at industrialization the introduction of modern technology, and the utilization of new sources of power including nuclear energy

42 The problems of the urban environment and of housing are perhaps worse in Asia than in any other part of the world Their consequences and symptoms are social maladjustments and the drastic physical changes evident in slums and environmental blight

43 Governments are assuming increasing responsibility for the planning and execution of housing and community improvement programmes as part of their general social and economic policy As social overhead projects these programmes are being more generally accepted as essential to economic development and, as

in the case of transport, power, health and education, their benefits are derived from the more balanced development of economic activities which utilize them

44 Housing is deeply involved in the process of saving and investment It is a type of capital formation that both encourages and strengthens long-term patterns of saving A concerted effort is needed to mobilize all available resources including the direct contribution of future householders through self-help and co-operative methods and pr

se it is to channel to public finance, ngs and funds, as well as the contribution of industrial enterprises

45 The production and use of local materials, both through cottage industries and on a larger scale, may greatly contribute to the reduction of the cost of housing A further contribution can be made by mobilizing through self help and mutual help the future house-holders' labour and skills for the building and improvement of their own houses and communities In and around large urban agglomerations, however, a large-scale and highly productive building and building materials industry is called for

46 Housing standards cannot be separated from the corresponding standards of community planning, and essential services and facilities, including, in urban areas, sanitation, water, and transport between the workers' houses and the place of work When resources are scarce, greater emphasis should be laid on adequate community and regional planning and the provision of utilities, sanitation and water services and other facilities, rather than on a limited number of good houses in an insufficient environment

47 Better housing adapted to local needs, improved living conditions and adequate amenities and community facilities in rural areas, in particular, may help to slow down the drift towards the city At the same time it will encourage the location of small-scale and larger industries within clusters of existing villages and may bring to the rural population a new and additional source of livelihood

48 It is the task of physical or environment planning to define the different components of a specific development programme in physical terms, by assessing and recommending within a given area, zones for industrial, agricultural, residential, social and cultural uses, and by establishing a rational pattern for transport and communications, for power supply and distribution, and for other utility networks as parts of the over-all programme

49. Environmental or physical planning provides an opportunity to reconcile the often divergent interest of material production, in its narrow sense, with human welfare and to help establish a balance in the urban/rural relationship of a developing area The more rapid the urbanization process becomes, the more necessary it is to plan for it, so that costly mistakes of the past can be avoided

50 Physical planning is part of a many sided process of economic and social development Social and political conditions project throughout the planning and development cycle a general and often changing framework within which action is conceived, accepted and executed It is therefore important to stimulate popular participation in the different types of planning and execution of development programmes in general, and physical planning in particular

51. Physical planning, like all planning, is a continuing process and it can be effectively practised only by an organization having the required expert knowledge and the necessary legislative and the financial authority Its work is of a long term character and the concept of comprehensive planning requires team work It is therefore essential to establish the required planning organization, train the necessary personnel and set out the methods and procedures in addition to producing plans At the same time, a close relationship between the physical planning organ and the economic and social units of government is a primary condition for success

52 Each community is related to others as regards economic, physical and social factors Development in one place calls for co-ordination of local projects with regional and national programmes The region, in fact, is the link between the individual community and the nation A regional plan offers an easier identification of national goals in terms of local action.

53 Regional planning has in the past been primarily confined

range of geographic locations may expand also the opportunity for careful regional planning of the use of resources that have not been tapped before owing to lack of power The proce

reconstruction of rural regions

54 The Seminar noted with satisfaction that an Asian conference on regional (physical) planning is to be held in 1957 or 1958 and that it will examine (a) the trends and methods of physical planning and its place in the total process of economic and social development

and

on

at t felt that the physical and social factors influencing community cohesion and the creation of desirable neighbourhoods required attention and study It was finally agreed that integrated research (economic, social, technological, cultural, etc ) in the process of planning, construction and further growth of communities—for example,

in Asia. The Asian countries are evolving new approaches of their own, more suited to their circumstances and needs Their experience may prove to be of interest and value to other countries as well.

### *Next steps*

56 The Seminar felt confident that, with increased industrialization and economic development, it would be possible to find solutions which would mitigate the

future action it was of the

scope and urgency of the

continued study and rese.

international agencies, a

econ

58 The Seminar felt that there is a need in Asia and the Far East area for continuing activity in the field of urbanization and for liaison arrangements among those engaged in study and operational work It was further of the opinion that efforts should be made to co-ordinate research and the exchange of information on its results

59 The Seminar considered that owing to the many-sided character of the industrialization and urbanization processes, activities contributing to their sound growth (such as economic planning, education, health, housing, and action in the field of productivity and labour problems, community organization and development, social science research and studies) should be increasingly promoted on a concerted basis

60 It was also felt that arrangements should be made by the United Nations and specialized agencies for the exchange of experiences on various policy aspects of urbanization, including such problems as the financing of activities and projects conducive to balanced urbanization and surveys as may be necessary of the over all experience of the different countries in this field

61 Finally, it was thought that there should be increasing co-ordination of various activities in the field of urbanization, such as conferences on this subject itself, on specific aspects and phases of urbanization, and on related problems (for example, the proposed Asian conference on regional planning in relation to urbanization and industrialization, the periodic meetings of the ECAFE Working Party on Housing and Building Materials and other ECAFE bodies dealing with economic development and industrialization, and meetings called by the UNESCO Research Centre on Social Implications of Industrialization in Southern Asia)

62 Further, in order to facilitate study and action in the field of urbanization, the Seminar felt that there was a need to develop considerable demographic data on internal migration

63 Members of the Seminar expressed great interest in some continuing activities which may be considered as a follow up of this first Seminar Representatives of the United Nations ande UNESCO Secretariats drew attention to the great importance attached by the Economic and Social Council to the related problems of industrialization and urbanization in the economically under-developed areas A similar jointly sponsored seminar is to be held in Latin America in 1958 and case studies will be initiated in that region

64 It was noted with approval that in the forthcoming United Nations Second Report on the World Social situation due emphasis will be placed on the urbanization problems in under-developed areas

65 The Seminar also learned that the UNESCO Research Centre on Social Implications of Industrialization in Southern Asia, Calcutta, India, would provide through its Advisory Committee (of thirteen Member nations and interested specialized agencies) and its liaison committees a clearing house for information and co-ordinating functions with respect to research on social aspects of urbanization as well as undertake certain research itself

66 It was also pointed out, that within the existing United Nations Expanded Technical Assistance Programme opportunities are offered to Member Governments for training abroad of officials having to deal with urbanization problems, for experts to assist Governments in formulating policies organizing research centres, etc , and that UNESCO s programme in the Social Sciences for Aid to Member States could also assist

67 Hope was expressed that an international financial agency, such as the proposed Special United Nations Fund for Economic Development would be able to provide, on a long term basis, loans to Asian countries for ameliorating serious social, physical and economic conditions arising from urbanization